DOCUMENT RESUME

ED 086 370 PS 007 122

AUTHOR	Plantec, P.; And Others
TITLE	Final Report on the Evaluation of Project Upswing's First Year.
INSTITUTION	Operations Research, Inc., Silver Spring, Md.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
REPORT NO	TR-731
PUB DATE	Dec 72
CONTRACT	OEC-0-71-4668(607)
NOTE	464p.
EDRS PRICE	MF-$0.65 HC-$16.45
DESCRIPTORS	Academic Achievement; Achievement Tests; *Elementary School Students; *Learning Disabilities; *Program Evaluation; Self Esteem; *Tutorial Programs; *Volunteers
IDENTIFIERS	*Project Upswing

ABSTRACT

This technical report describes the evaluation of the first year of Project Upswing, a 2-year experimental study to determine the potential contribution of volunteers in helping young children overcome learning difficulties. The three large groups of first grade children involved received tutoring either from specially trained volunteers, untrained volunteers, or received no tutoring as a control group. Results indicated that children taught by either the trained or untrained tutors made greater gains in achievement than the control children. Tutored children also showed gains in self-esteem. Volume I of this report includes profiles of participants and their first impressions of the project. Volume II provides an analysis of tutoring results and final impressions of the project. An appendix gives facsimiles of evaluation questionnaires. (CS)

FILMED FROM BEST AVAILABLE COPY

ED 086370

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRO
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRE
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

Technical Report No. 731

SCOPE OF INTEREST NOTICE
The ERIC Facility has assigned
this document for processing
to: PS

In our judgement, this document
is also of interest to the clearing-
houses noted to the right. Index-
ing should reflect their special
points of view.

TM
EC

ORI

Final Report on the Evaluation of Project Upswing's First Year

[illegible] and J. [illegible]

Operations Research, Inc. A LEASCO Company

ED 086370

OPERATIONS RESEARCH, Inc.

SILVER SPRING, MARYLAND

Final Report on the Evaluation of Project Upswing's First Year

P. Plantec, B. Paramore, and J. Hospodar

December 1972

Prepared under Contract No. OEC-0-71-4668 (607)
for the U.S. Office of Education
Department of Health, Education, and Welfare
Washington, D.C. 20202

PS 007122

FOREWORD

The first volume of the final evaluative report on Project Upswing's first year is primarily descriptive. It presents characteristics of the major groups of people involved (children, volunteers, and teachers) along with attitudes toward the project in its early stages. The Upswing "pre-tutoring" test battery also is described and the test results subjected to preliminary analysis. The examination of project effects, using final (end-of-year) test results and attitudes, are presented against this background in Volume II of the report.

Volume I was written during the course of the first year of the project. The present-tense description has not been changed. The opinions expressed in this report are those of Operations Research, Inc. They do not necessarily reflect the opinions of the U.S. Office of Education.

ACKNOWLEDGMENTS

ORI would like to formally express its appreciation of the support given the Upswing evaluation team by the U.S. Office of Education (USOE), the individual project directors and their staffs, the school systems involved, and the children, volunteers, and teachers who participated in the project. We regret that all of these people cannot be named because this project has been characterized by dedication, expertise, and a readiness for open communication that are not commonly encountered by an "outside evaluator."

From the USOE, Dr. Max M. Mueller, acting director of the Division of Research, Bureau of Education for the Handicapped, was the project monitor for the evaluation. He has maintained active interest in the progress of the evaluation and has unfailingly made time to discuss any problems that arose. Miss Jewell Chambers, the monitor for the four city projects, has worked closely with the study team, making significant contributions to questionnaire design and to project and evaluation procedures from her experience teaching and working with volunteers in education. Mr. Donald Chill, in his capacity as forms clearance officer, also made many valuable suggestions to improve the effectiveness of the questionnaires used in the project.

The four project directors were:

- Mrs. Gertrude Meyers
  Professor of Education
  University of Denver
- Dr. Polly F. Williams
  Assistant Professor of Special Education
  University of Mississippi
- Dr. Walter Cegelka
  Coordinator of Special Education
  University of Missouri—St. Louis
- Dr. Louis H. Falik
  Associate Professor
  Department of Counseling
  California State University, San Francisco

We know that the directors and their staffs often were burdened by the task of gathering information for the evaluation, but they made little complaint. They were always ready to discuss project operations with us and freely provided their insights into problems as well as successes.

The ORI study team was headed by Mr. Peter M. Plantec, associate program director for educational research and evaluation. The staff included Mrs. Cheryl Martorana, who made a major contribution to the evaluation design and first questionnaires before leaving ORI to bear a son; Miss Joyce Hospodar, survey coordinator and research analyst, who performed the attrition and cost-benefit analyses and wrote those sections of this report, and Miss Barbara Paramore, project leader and principle author of this report. Mr. Richard Messalle, an ORI senior staff member, and Mr. Theodore Reiss, an ORI consultant, provided strong computer programming support. Dr. Samuel G. Kneale, ORI senior scientist, and Mr. Gary Hendricks a consulting economist and statistical design-analysis expert, helped the study team work out analytical approaches and contributed to the interpretation of project results.

Mr. Percy Walcott contributed to the analysis of volunteer and teacher questionnaire data and helped to write Volume II of this report.

Special thanks are due Dr. Joseph F. Jastek, psychologist and author of the Wide-Range Achievement Test. Dr. Jastek graciously gave a day of this time to review the WRAT results and offer suggestions for their analysis and interpretation in relation to the other test data.

SUMMARY OF THE EVALUATION FINDINGS

BACKGROUND

Organization

Project Upswing is a 2-year experimental study to determine what contribution volunteers can make in helping very young children overcome learning difficulties before they become serious impediments to a successful school experience. This report describes the evaluation of the first year of Upswing.

The project was conducted in the 1972-73 school year in four cities: Denver; Oxford, Mississippi; St. Louis; and San Francisco. It was a joint enterprise of a university and the public school system in each city. The university managed project operations, monitored by the U.S. Office of Education, which provides the funds.

A private research company—Operations Research, Inc.—was responsible for the analysis of project results.

Major Groups of Participants

When the project began it involved a total of 407 volunteers, 407 children, and the 130 teachers of those children. These numbers were reduced over the year, primarily by volunteer attrition.

The children were selected by their teachers and randomly assigned to three equal size groups—one who would have trained volunteer tutors, one who would have tutors who did not receive Upswing training, and a control group who would not be tutored. All groups were tested at the beginning and end of the school year (see Volume I, Section II, for description of the test battery). Analysis of the initial test results verified that the random assignment yielded three groups of children comparable in reading proficiency, visual-motor integration skills, and IQ.

Most of the volunteers were married women with children, not employed outside the home, or college students. There were volunteers of all ages, although the population was slightly weighted with younger people. The volunteers were well educated and tended to have above-average family income. About one-third had some formal training in child development (usually a college course) before joining Project Upswing and about half had relevant experience as volunteer tutors, teacher aides or teachers.

The two groups of volunteers—those who received training and those who did not—were comparable in makeup in terms of income, education, experience, etc. The only meaningful difference was that the untrained group included more college student volunteers younger than 21. The analysis of what factors influenced tutoring results showed that none of the volunteer background characteristics was important, not even previous relevant training and experience.

The teachers of the Upswing children were, as a group, relatively young (about 40% between 21 and 30 years old). Almost all were college graduates, but only a small percentage had completed advanced degrees. Over half had some training in education of children with learning problems, generally in the form of graduate-level college courses. Most had been teaching for at least three years, but a sizable group were new at teaching first grade. Almost all teacher participants in Denver and San Francisco had worked with volunteers or paid aides before Upswing, and about two-thirds of the Oxford teachers had such experience. Only about a thrid of the St. Louis teacher participants had worked with volunteers or aides before.

EVALUATION FINDINGS

Tutored Children Made Greater Gains in Reading Than the Control Group Children

Statistical analysis of pre- and post-tutoring Wide Range Achievement Test (WRAT) results established that the groups of children tutored by trained and untrained Upswing volunteers made more progress in reading than did the control group of children who had similar learning-related characteristics at the beginning of the project but were not tutored. The amount of mean difference was not dramatic, but it was real. That is, the differences observed between the tutored and control children's changes in WRAT score statistically could not have occurred by chance. The tutored children showed a mean increase in WRAT standard score of 7.5 points. The control group mean change was four standard score points.

The greater mean improvement in reading by the tutored children is important, although the difference is small, if the trend persists over time. The tutored and control children are being followed for a second year and their relative levels of reading proficiency will be analyzed as part of the second-year Upswing evaluation.

Tutoring Helped the Children in Important Areas Other Than Reading

Teachers and the volunteer tutors found that low self-esteem was a major problem among the children who had Upswing tutors. The volunteers found that nearly all children who had low self-esteem improved over the tutoring period, while teachers found that about two-thirds of the children with problems improved. The study hypothesis that gains in reading skills are accompanied by gains in self-esteem was supported by the analysis.

Improved oral language skills also appear to be an important benefit of one-to-one tutoring. Both teachers and volunteers found about two-thirds of the tutored children's oral skills underdeveloped at the beginning. The volunteers noted progress in almost all of the children who had this kind of difficulty; teachers noted improvement in about 70%.

Gains in oral language skills were found to be related to gains in self-esteem. Gains in oral language and reading also occurred together.

Hyperactivity and, more so, inability to "pay attention" were common among the children tutored in Project Upswing. Tutoring appears to have had some impact in alleviating these kinds of problems; however, the gains here were not as great as in other areas. This outcome was as expected, since hyperactivity and distractibility are problems that often have physical origin.

An interesting finding was that the children who made the greatest progress in reading commonly continued to have difficulty paying attention at the end of the year. It is probable that boredom affected children who had achieved reading competency. It also seems probable, from the incidence of attention problems reported and from the low "cure rate," that the adults may have expected more maturity in this area than was appropriate and that the children were absorbing more than they appeared to be absorbing.

Tutoring Did Not Help Children Improve Their Visual-Motor Coordination

An objective test (the Beery-Buktenica Developmental Test of Visual-Motor Integration, known as the VMI) established that tutoring did not help the children improve their visual-motor coordination. All groups of children showed immaturity in this aspect of psychomotor development at the beginning of the tutoring period. The mean VMI performance of all groups of children was at about the level normally expected of 5½-year olds. The children showed virtually no change on the final VMI test: neither tutoring nor simply growing older enhanced VMI skills. This suggests that specific instructional techniques are needed to correct such coordination problems.

Training Did Not Influence Volunteer Effectiveness in the First Year of Upswing

Statistical tests showed that the training given in the first year of Upswing did not make the volunteer tutors any more effective in improving children's reading skills. Nor were the trained and untrained volunteers' observations about the children's progress in other areas appreciably different. However, it appears that the training content and timing in the first year of Upswing were deficient. The second year of the project offers a chance to study the efficacy of revised training programs, aimed more toward individual needs and a greater variety of specific instructional techniques. More of the training will be given during the tutoring period in the second year; in the first year most of the training was preservice.

The second-year evaluation will seek to test the first-year finding about the impact of training. If this finding is supported with the various training strategies employed in the second year, then we will conclude that formal training is unnecessary in a tutoring project such as Upswing. Without training, project costs would come down considerably.

Processes Within the Child, Along With Volunteer Satisfaction and Confidence, Proved to be Most Related Children's Progress in Reading

As might be expected, knowledge of a great many variables is required to predict how reading skills will develop. ORI collected data on 46 variables for the Upswing study. We found that 36 of these were related to change in reading test score. Individually, these variables are weak predictors. A cluster of conditions interact with each other and together influence reading proficiency.

The most important factors seem to have been: changes in the child's self-esteem and ability to pay attention; volunteer's feelings about how adequately she/he was prepared to use methods and materials of tutoring; volunteer's willingness to tutor again; (an indicator of motivation) and whether the volunteer's expectations about the project were fulfilled (an indicator of role satisfaction). Again, these variables (and others) interact to influence development of reading skills. The relationships are quite complex. No one or a few variables offer a key to reading success.

Volunteers Prefer to Receive Training and Teachers Prefer to Work With Trained Volunteers

Training did have an impact on the volunteers' and teachers' attitudes, even though it did not influence volunteer effectiveness. Both trained and untrained tutors generally seemed to believe that training was important, and the untrained tended to show slightly less confidence in their ability to tutor. Teachers, as a group, clearly preferred to work with trained volunteers, often because they felt the untrained lacked the skills to function independently without considerable support, which the teachers indicated they did not have time to give. They tended to feel that the trained volunteers were better prepared to work as tutors.

Feelings about the importance of training may be especially strong in this project because half of the volunteers received training and half did not. This would particularly affect the untrained volunteers, who often seemed to feel the other group was "one up on them." It is likely that professionalism among teachers would cause them to value training highly. These feelings persisted despite the fact that, as far as the children were concerned, it made no difference whether the volunteers were trained or not. This kind of result points up the need for independent research.

Teachers Wanted to be Informed About the Activities of Upswing Tutors and to be Consulted, But They Did Not Want to be "Leaned On"

Although teachers generally did not want to have to tell the Upswing volunteers what to do, they did want to know what was being done. They were most willing to take a consultative role, giving their views of their pupils' needs to the tutors and ensuring that classroom and tutoring instruction were complementary. Many stated that they wanted the volunteers to make their own plans for tutoring but also to be willing to devote sessions to teacher-requested activities.

Volunteers Often Felt a Need for More Help Than They Received

It appears from the Upswing experience that access to help, on specific problems as needed, may be more important than formal training tutoring program. Although trained volunteers showed more satisfaction with the amount of help received over the year than did untrained, a sizable proportion even of the trained group (about 40%) said they did not receive enough help. Over half of the untrained volunteers said they did not receive enough help. Generally they seemed to want advice—help in understanding their pupils' needs, in planning tutoring activities to address specific needs, and in evaluating progress. They did not seem to want highly directive assistance.

Regardless of training, volunteers generally felt it was important to at least confer with their pupils' teachers periodically. The idea of a volunteer tutor functioning completely independently of the teacher seems impractical.

Providing Elaborate Tutoring Materials Seems Unnecessary

The trained Upswing volunteers did not make good use of the packaged reading programs provided by the project. Both the trained and untrained were eclectic in choosing tutoring methods and materials. They evidently would prefer to have or to be informed about a variety of simpler materials. This finding has important cost implications. The cost of materials in a project like Upswing could be minimal without impairing ability to tutor.

TABLE OF CONTENTS

Page

FOREWORD i

ACKNOWLEDGMENTS iii

SUMMARY OF THE EVALUATION FINDINGS. vii

LIST OF FIGURES xxiii

LIST OF TABLES xxxi

VOLUME I

PROFILES OF PARTICIPANTS AND THEIR FIRST IMPRESSIONS OF THE PROJECT

I. INTRODUCTION 1-1

  SUMMARY OF PROJECT ORGANIZATION 1-1

  PURPOSE AND CONTENT OF REPORT 1-3

  DATA SOURCES 1-4

  DATA HANDLING 1-5

    Child Test Data; Registration and First Impressions Forms

II. UPSWING'S CHILD POPULATION 2-1

  PURPOSE AND CONTENT 2-1

  PARAMETERS OF THE POPULATION 2-3

    How the Children Were Selected; Population Size; The Children's Ages

DATA SOURCES 2-11

The Slossen IQ Test; The WRAT; The Metropolitan Achievement Test Series; The Developmental Test of Visual-Motor Integration

TEST ADMINISTRATION AND SCORING 2-14

SUMMARY OF TEST RESULTS 2-15

Intelligence; Achievement; Visual-Motor Integration

TEST RESULTS 2-17

Intelligence; Achievement; Visual-Motor Integration; Discussion of General Test Findings

BACKGROUND INFORMATION ON DENVER CHILDREN 2-40

Purpose; Data Source; Parameters of Population Described; Children's Family Background Characteristics; Children's School Experience Prior to Upswing; Children's Attitudinal Characteristics

III. PROFILE OF VOLUNTEERS 3-1

PURPOSE 3-1

DATA SOURCE 3-2

PARAMETERS OF THE POPULATION DESCRIBED 3-2

SUMMARY OF VOLUNTEER CHARACTERISTICS 3-4

VOLUNTEER CHARACTERISTICS 3-6

Age; Sex; Marital Status; Family Income; Occupation; Education; Related Prior Experience

IV. PROFILE OF TEACHERS 4-1

PURPOSE 4-1

DATA SOURCE 4-1

SUMMARY OF TEACHER CHARACTERISTICS 4-1

TEACHER CHARACTERISTICS 4-2

Age; Education; Teaching Experience; Experience With an Aide or Volunteer

V. FIRST IMPRESSIONS OF PROJECT UPSWING 5-1

PURPOSE 5-1

DATA SOURCE 5-1

VOLUNTEERS' FIRST IMPRESSIONS OF PROJECT UPSWING 5-3

Parameters of the Population; Volunteer Initial Opinion; Volunteer Opinions About Project Upswing's Potential Effects on Children; Volunteer Opinions About Training or Orientation; Volunteer Opinions About Probable Effectiveness of Tutoring Methods and Materials; Volunteer-Pupil Relationship; Volunteer-Teacher Relationship; Volunteer Attitudes Toward the Task of Preparing for Tutoring Sessions; Assessment of the Difficulty of Tutoring; General Satisfaction With Role as Volunteer Tutor

TEACHERS' FIRST IMPRESSIONS OF PROJECT UPSWING 5-45

Parameters of the Population; Special Considerations About the Data; Teacher Initial Opinion Summary; Teacher Opinions About Project Upswing's Potential Effects on Children; Teacher Observations of Changes in Children Since Tutoring Began; Teacher Assessment of Children's Responses to Volunteers; Teacher Opinion of Volunteer Training; Teacher Attitudes Toward Working With Volunteer Aides; Teacher Willingness to Work With Upswing Volunteers Again

COMPARISON OF SELECTED VOLUNTEER AND TEACHER FIRST IMPRESSIONS OF PROJECT UPSWING 5-73

DENVER PARENTS' FIRST IMPRESSIONS OF PROJECT UPSWING 5-75

Parent Initial Opinion Summary; General Attitudes Toward Upswing; Children's Attitudes; Parent Involvement in Child's Education

VOLUME II

ANALYSIS OF TUTORING RESULTS AND FINAL IMPRESSIONS

I. INTRODUCTION 1-1

PURPOSE AND CONTENT 1-1

DATA SOURCES 1-2

DATA HANDLING 1-2

Child Test Data; Final Impressions Questionnaires

ORGANIZATION OF VOLUME II 1-3

II. ANALYSIS OF TUTORING RESULTS 2-1

PURPOSE AND CONTENT 2-1

SUMMARY OF RESULTS 2-1

CHILD POPULATION IN THE FINAL ANALYSIS OF UPSWING TEST DATA 2-3

The WRAT; The Metropolitan Achievement Test Series; The VMI

SCORE CONVERSION PROCEDURES FOR UPSWING'S TEST BATTERY 2-6

WRAT; Metropolitan Achievement Test Series; VMI

ANALYSIS OF INDIVIDUAL TEST RESULTS 2-7

The WRAT; The Metropolitan; VMI

RELATIONSHIPS BETWEEN TESTS 2-25

CHILDREN INCLUDED IN ANALYSIS OF VOLUNTEER AND TEACHER ASSESSMENTS OF CHANGE 2-27

DATA SOURCES 2-27

SPECIAL CONSIDERATIONS ABOUT THE DATA 2-27

VOLUNTEER AND TEACHER ASSESSMENTS OF CHANGES IN THE CHILDREN 2-28

Volunteers Describe Children's Overall Progress; Teachers Describe

Children's Progress Toward Average Grade-Level Achievement; Volunteers Describe Development of Reading Skills; Teachers Describe Development of Reading Skills; Volunteers Describe Development of Language Skills; Teachers Describe Development of Language Skills Other Than Reading; Volunteers Describe Change in Self-Esteem; Teachers Describe Change in Self-Esteem; Volunteers Describe Children's Readiness to Communicate; Teachers Describe Children's Readiness to Communicate; Volunteers Describe Changes in Psychomotor Behavior; Teachers Describe Changes in Psychomotor Behavior

ANALYSIS OF INFLUENCES ON CHANGE IN CHILDREN'S SCHOOL PERFORMANCE 2-72

Methodology; Parameters of the Population; General Findings; Analysis of Specific Variables Related to Change in Children's Tested Reading Achievement Level

III. PARTICIPANTS' RETROSPECTIVE VIEWS OF PROJECT UPSWING 3-1

PURPOSE 3-1

DATA SOURCES AND COLLECTION PROCESS 3-2

FORMAT 3-2

VOLUNTEERS' FINAL IMPRESSIONS OF PROJECT UPSWING 3-3

Parameters of the Population; Summary of Volunteers' Final Impressions; Project Organization and Operations; Training; Relationships of Project Participants; Volunteer Satisfaction

TEACHERS' FINAL IMPRESSIONS OF PROJECT UPSWING 3-61

Parameters of the Population; Special Considerations About the Data; Summary of Teachers' Final Impressions; Project Organization and Operations; Volunteer Training; Relationships of Project Participants; Teacher Satisfaction

IV. CASE STUDIES 4-1
  BILLY FORTHWRIGHT, AGE 7½ 4-1
    Reason for Case Study; Conclusion
  GLENN ARTHOR, AGE 7½ 4-4
    Reason for Case Study; Conclusion
  MICHAEL (MIKE) EDWARDS, AGE 6 4-7
    Reason for Case Study; Conclusion
  PARNELL BEAUFORD, AGE 6½ 4-9
    Reason for Case Study; Conclusion
V. COST-EFFECTIVENESS ANALYSIS OF PROJECT UPSWING'S FIRST YEAR 5-1
  PURPOSE 5-1
  METHODOLOGY 5-1
    Direct Cost; Indirect Cost; Marginal Cost
  DATA SOURCE 5-4
  SUMMARY OF FINDINGS FROM THE COST ANALYSIS 5-4
  COST OF A VOLUNTEER 5-4
    Marginal Cost
  COST-EFFECTIVENESS 5-7
VI. ANALYSIS OF VOLUNTEER ATTRITION 6-1
  PURPOSE 6-1
  DATA SOURCES 6-1
  PARAMETERS OF THE POPULATION 6-2
  SUMMARY OF FINDINGS IN THE ANALYSIS OF VOLUNTEER ATTRITION 6-3
  DATE OF TERMINATION 6-6
  REASONS FOR TERMINATING TUTORING GIVEN BY VOLUNTEERS 6-9
  PERSONAL CHARACTERISTICS OF VOLUNTEERS WHO ATTRITED 6-12

Age; Occupation; Previous Training and Tutoring Experience of Volunteer Attritees

VII. CONCLUSIONS AND RECOMMENDATIONS 7-1

DID UPSWING TUTORING WORK? 7-1

APPENDIX

EVALUATION QUESTIONNAIRES

LIST OF FIGURES

VOLUME I

Page

2.1. Number of Upswing Children With Usable Test Data, by Status Group 2-5

2.2. Number of Children With Usable Test Data, by Status Group and City 2-7

2.3. Children's Ages by Status Group. 2-9

2.4. Children's Ages, by City 2-10

2.5. Children's Slossen IQ Scores, by Status Group 2-19

2.6. Children's Slossen IQ Scores, by City 2-20

2.7. Percentile Ranks of the WRAT Reading Section— All Children 2-22

2.8. WRAT Reading Results, by Status Group 2-24

2.9. Metropolitan Primer Results, by Status Group 2-26

2.10 WRAT Reading Results, by City 2-31

2.11. Metropolitan Primer Results, by City 2-32

2.12. VMI Results, by Status Group 2-33

2.13. Deviation of VMI Age Equivalents from Chronological Ages, All Children 2-35

2.14. VMI Results, by City 2-36

2.15. Family Income of Denver Children Whose Parents Returned Registration Forms 2-43

3.1. Age Distribution of Trained and Untrained Volunteers, All Cities 3-7

3.2. Age Distribution of Volunteers, by City 3-11

3.3. Marital Status of Trained and Untrained Volunteers, All Cities 3-13

3.4. Marital Status of Volunteers, by City 3-14

3.5. Trained and Untrained Volunteers' Family Income, All Cities 3-15

3.6. Volunteers' Family Income, by City 3-17

3.7. Occupation of Trained and Untrained Volunteers, All Cities 3-19

3.8. Trained and Untrained Volunteers' Level of Education, All Cities 3-24

3.9. Trained and Untrained Volunteers' Previous Formal Training in Child Development, All Cities 3-26

3.10. Volunteers With Formal Training in Child Development, by City 3-27

3.11. Trained and Untrained Volunteers' Previous Teaching or Tutoring Experience, All Cities 3-29

4.1. Age Distribution of Teachers, All Cities 4-3

4.2. Teachers' Highest Level of Education, All Cities 4-7

4.3. Prior Teacher Training in Education of Children With Learning Problems, by City 4-9

4.4. Years of Teaching Experience, All Cities 4-11

4.5. Years of Teaching First Grade, All Cities 4-13

4.6. Teacher's Experience With an Aide or Volunteer, All Cities 4-15

5.1. Trained and Untrained Volunteers' Opinions About Upswing's Potential to Help Children, All Cities 5-7

5.2. Volunteer Opinion About Upswing's Potential to Help Children, by City 5-8

5.3. Trained and Untrained Volunteers' Opinions About Upswing's Probable Effect on Progress of the Specific Children They Tutor, All Cities 5-9

5.4. Volunteer Opinion About Upswing's Probable Effect on Progress of the Specific Children They Tutor, by City . . . 5-10

5.5. Trained and Untrained Volunteers' Opinions of Upswing Training and Orientation, All Cities 5-13

5.6. Trained and Untrained Volunteers' Opinions About How Well They Were Prepared to Use the Methods and Materials of Tutoring, All Cities 5-16

5.7. Trained and Untrained Volunteers' Opinions About the Probable Effectiveness of the Tutoring Methods and Materials They Use, All Cities 5-20

5.8. Trained and Untrained Volunteers' Perceptions of Pupils' First Responses to Them, All Cities 5-23

5.9. Trained and Untrained Volunteers' Perceptions of Teacher Attitude Toward Their Assistance, All Cities 5-27

5.10. Trained and Untrained Volunteers' Opinions About Adequacy of Guidance Given Them by Teachers, All Cities 5-29

5.11. Trained and Untrained Volunteers' Attitudes Toward the Task of Preparing for Tutoring Sessions, All Cities 5-34

5.12. Volunteers' Assessment of the Difficulty of Tutoring, by Training Status, All Cities 5-38

5.13. Trained and Untrained Volunteers' Degree of Satisfaction With Their Role as Tutors, All Cities 5-42

5.14. Teacher Opinions About Upswing's Potential to Help Children, All Cities 5-49

5.15. Teacher Observations of Change in Children's Reading Ability, All Cities. 5-52

5.16. Teacher Observations of Change in Children's Behavior/ Attitude Toward School, All Cities 5-54

5.17. Teacher Observations of Children's Responses to Volunteers, All Cities 5-58

5.18. Teacher Opinion of Training Given to Volunteers, All Cities . 5-61

5.19. Teacher Attitudes Toward Working With Volunteer Aides, All Cities 5-66

5.20. Teacher Willingness to Work With Upswing Volunteers Next Year, All Cities 5-70

VOLUME II

2.1. Initial and Final Mean Standard Scores on the Wide Range Achievement Test, by Status Group, All Cities 2-9

2.2. Initial and Final Mean Standard Scores on the Wide Range Achievement Test by Status Group, by City 2-13

2.3. Distribution of Change on the WRAT for All Children in Denver, by Status Group 2-16

2.4. Distribution of Change on the WRAT for All Children in Oxford, by Status Group 2-17

2.5. Distribution of Change on the WRAT for All Children in St. Louis, by Status Group 2-18

2.6. Distribution of Change on the WRAT for All Children in San Francisco, by Status Group 2-19

2.7. Distribution of Change on the WRAT for All Children by Status Group, All Cities 2-21

2.8. Initial and Final Mean Standard Score of the Metropolitan Primer and Primary Test for Oxford and St. Louis, by Status Group 2-22

2.9. Initial and Final Mean Raw Scores on the Beery-Buktenica Visual Motor Integration Test, by Status Group, All Cities 2-24

2.10. Trained and Untrained Volunteers' Assessments of Project's Overall Impact on Their Pupils' Progress in School 2-31

2.11. Teacher Assessment of Children's Progress Toward Grade-Level Achievement, All Cities 2-32

2.12. Trained and Untrained Volunteers' Assessments of Change in Their Pupils' Reading Skills, All Cities 2-37

2.13. Teacher Assessment of Upswing's Effect on Children's Reading Skills, All Cities 2-38

2.14. Trained and Untrained Volunteers' Assessment of Change in Their Pupils' Language Skills, All Cities 2-43

2.15. Teacher Assessment of Upswing's Effect on Language Skills Other Than Reading, All Cities 2-44

2.16. Trained and Untrained Volunteers' Assessment of Change in Their Pupils' Confidence/Self-Esteem 2-49

2.17. Teacher Assessment of Change in Children's Self-Esteem, All Cities 2-51

2.18. Trained and Untrained Volunteers' Assessment of Change in Pupils' Willingness to Express Themselves Orally . . . 2-55

2.19. Teacher Assessment of Change in Children's Willingness to Express Themselves Orally, All Cities 2-58

2.20. Trained and Untrained Volunteers' Assessment of Change in Pupils' Hyperactive Behavior, If Any 2-62

2.21. Trained and Untrained Volunteers' Assessment of Change in Pupils' Ability to Pay Attention 2-64

2.22. Teacher Assessment of Change in Children's Hyperactive Behavior Since Tutoring Began, All Cities 2-66

2.23. Teacher Assessment of Change in Children's Ability to Pay Attention Since Tutoring Began, All Cities 2-70

3.1. Trained and Untrained Volunteers' Opinions About How Much Time Per Week Should Be Spent in Tutoring, All Cities 3-10

3.2. Time Spent by Trained and Untrained Volunteers in Preparing for Tutoring Sessions, All Cities 3-12

3.3. Trained and Untrained Volunteers' Indication of the Availability of Tutoring Materials 3-18

3.4. Trained and Untrained Volunteers' Opinions About the Effectiveness of the Teaching Methods and Materials They Used, All Cities 3-24

3.5. Trained and Untrained Volunteers' Primary Sources of Guidance and Assistance During Year, All Cities 3-28

3.6. Trained and Untrained Volunteers' Assessment of Adequacy of Guidance and Assistance Received During Year, All Cities 3-29

3.7. Trained Volunteers' Attendance at Inservice Training Sessions 3-38

3.8. Trained Volunteers' Rating of the Inservice Training Sessions 3-40

3.9. Volunteers' Descriptions of Children's Responses to Them at the Beginning of Project, and Now 3-42

3.10. Volunteer Assessment of How Child Felt About Missing Class Activities for Tutoring Sessions 3-44

3.11. Trained and Untrained Volunteers' Assessments of Children's Usual Response to Tutoring Activities 3-45

3.12. Volunteers' Assessments of Teacher Feelings About Assistance 3-50

3.13. Proportions of Trained and Untrained Volunteers Who Did and Did Not Receive Guidance from Their Pupils' Teachers 3-51

3.14. Trained and Untrained Volunteers' Feelings About the Adequacy of Guidance Received from the Teacher 3-52

3.15. Trained and Untrained Volunteers' Report on Whether Project Upswing Met Their Original Expectations 3-55

3.16. Trained and Untrained Volunteers' Willingness to Continue as Upswing Tutors 3-58

3.17. Feeling About Receiving Training Expressed by Volunteers Who Would Be Willing to Work as Upswing Tutors Again . . . 3-59

3.18. Teachers' Preferences About Giving Direction to Upswing Volunteers, All Cities 3-68

3.19. Teacher Opinion About Whether Trained, Untrained Volunteers Received Adequate Preparation for Tutoring, All Cities . . . 3-75

3.20. Teacher Assessment of Children's Response to Tutors, All Cities 3-79

3.21. Attitudes of Volunteers Towards Teachers, as Assessed by Teachers, All Cities 3-81

3.22. Teachers' Understanding of Project Upswing and Their Role in It, All Cities 3-85

3.23. Teacher Preference About Working With Upswing Volunteers Again, All Cities 3-87

6.1. Comparison on Age of Volunteers Originally in Upswing and Those Who Dropped Out, All Cities 6-13

6.2. Age Distribution of Trained and Untrained Volunteers Who Dropped Out, All Cities 6-15

6.3. Percentage Contribution to Total Attrition of Each Occupational Category 6-17

6.4. Comparison of Attrition Rate of Trained and Untrained Volunteers Who Had Previous Training in Child Development With Volunteers Who Had No Previous Training, All Cities 6-20

6.5. Trained and Untrained Dropouts' Previous Teaching or Tutoring Experience, All Cities 6-22

7.1. Rate of Progress in Reading as Measured by WRAT: Tutored Versus Control Children 7-2

LIST OF TABLES

VOLUME I

Page

2.1. Cross Tabulation of Scores on the WRAT Reading and Metropolitan Primer Tests 2-27

2.2. Highest Level of Education of Denver Parents Who Registered Their Children for Upswing 2-44

2.3. Indications of Denver Upswing Children's Social Relationships 2-48

3.1. Number of Trained and Untrained Volunteers Who Registered for Upswing, by City 3-3

3.2. Trained and Untrained Volunteers in Each Age Range, by City 3-8

3.3. Ages of Upswing Student Volunteers, All Cities 3-9

3.4. Sex Distribution of Upswing Volunteers, by City 3-12

3.5. Volunteer Occupation, by City 3-21

3.6. Job Types of Employed Volunteers, All Cities 3-23

3.7. Volunteers' Level of Education, by City 3-25

3.8. Volunteers' Previous Teaching or Tutoring Experience, by City 3-30

4.1. Teacher Age, by City 4-4

4.2. Teachers' Highest Level of Education, by City 4-8

4.3. Level of Teacher Training in Education of Children With Learning Problems 4-10

4.4. Years of Teaching Experience, by City 4-12

4.5. Years of Teaching First Grade, by City 4-14

4.6. Teacher Experience With an Aide or Volunteer, by City 4-16

5.1. Volunteer Opinion About Effectiveness of Training and Orientation, by City 5-14

5.2. Volunteers' Opinions About How Adequately They Were Prepared to Use Tutoring Methods and Materials, by City 5-17

5.3. Volunteers' Opinions About Probable Effectiveness of Tutoring Methods and Materials They Use, by City 5-21

5.4. Volunteers' Perceptions of Pupils' First Responses to Them, by City 5-24

5.5. Volunteers' Perceptions of Teachers' Attitudes Toward Their Assistance, by City 5-28

5.6. Volunteers' Opinions About Adequacy of Guidance Received from Teachers, by City 5-31

5.7. Volunteers' Attitudes Toward Task of Preparing for Tutoring Sessions, by City 5-35

5.8. Volunteers' Assessment of the Difficulty of Tutoring, by City 5-39

5.9. Volunteers' Degree of Satisfaction With Their Role as Tutors, by City 5-43

5.10. Teacher Opinions About Upswing's Potential to Help Children, by City 5-50

5.11. Teacher Observations of Change in the Children's Reading Ability, by City 5-53

5.12. Teacher Observations of Change in Children's Behavior/Attitude Toward School, by City 5-55

5.13. Teacher Observations of Children's Responses to Volunteers, by City 5-59

5.14. Teacher Opinions of Training Given to Volunteers, by City 5-62

5.15. Teacher Attitudes Toward Working With Volunteer Aides, by City 5-67

5.16. Teacher Willingness to Work With Upswing Volunteers Next Year, by City 5-71

5.17. Indicators of Denver Respondents' General Attitude Toward Upswing 5-77

5.18. Denver Children's Attitudes Toward Upswing as Perceived by Parents 5-79

5.19. Denver Parents' Feelings About How Much They Should Be Involved in Their Children's Education 5-80

VOLUME II

2.1. Distribution of Amount of Change in WRAT Standard Score from Initial to Final Test, by Status Group, All Cities 2-11

2.2. Volunteers' Assessment of Project's Impact on Their Pupils' Overall Progress in School, by City 2-29

2.3. Teacher Assessment of Children's Overall Progress Toward Average Grade-Level Achievement, by City 2-33

2.4. Volunteers' Assessment of Change in Their Pupils' Reading Skills, by City 2-35

2.5. Teacher Assessment of Upswing's Effect on Children's Reading Skills, by City 2-39

2.6. Volunteers' Assessment of Change in Their Pupils' Language Skills, by City 2-41

2.7. Teacher Assessment of Upswing's Effect on Children's Language Skills Other Than Reading, by City 2-46

2.8. Volunteers' Assessment of Change in Their Pupils' Confidence/Self-Esteem, by City. 2-48

2.9. Teacher Assessment of Change in Children's Self-Esteem, by City 2-52

2.10. Volunteers' Assessment of Change in Pupils' Willingness to Express Themselves Orally, by City 2-54

2.11. Teacher Assessment of Change in Children's Willingness to Express Themselves Orally, by City 2-57

2.12. Volunteers' Assessment of Change in Pupils' Hyperactive Behavior, by City 2-60

2.13. Volunteers' Assessment of Change in Pupils' Ability to Pay Attention, by City 2-63

2.14. Teacher Assessment of Change in Hyperactivity Among Enrollees Since Tutoring Program Began, by City 2-67

2.15. Teacher Assessment of Change in Children's Ability to Pay Attention Since Tutoring Began, by City 2-71

2.16. Variables Related to Change in WRAT Reading Test Score 2-76

2.17. Correlations Between Major Independent Variables and Change in WRAT Score 2-81

3.1. Rates of Response to Final Questionnaire for Volunteers in Each City and Project-Wide, by Status Group 3-4

3.2. Volunteer Opinion About How Much Time Per Week Should by Spent in Tutoring. 3-9

3.3. Volunteer Estimate of Time Spent Preparing for Tutoring Sessions 3-11

3.4. Volunteers' Usual Place for Tutoring 3-14

3.5. Volunteers' Assessment of the Adequacy of the Tutoring Environment 3-15

3.6. Volunteers' Indication of the Availability of Tutoring Materials 3-17

3.7. Trained and Untrained Volunteers' Usage of Various Tutoring Activities/Materials, All Cities 3-20

3.8. Volunteers' Opinions About the Effectiveness of the Tutoring Methods and Materials They Used, by City . . . 3-25

3.9. Volunteers' Primary Sources of Guidance and Assistance, by City 3-27

3.10. Kinds of Guidance and Assistance Trained and Untrained Volunteers Prefer to Get from Teachers 3-31

3.11. Ranking of Factors Important to Being an Effective Upswing Tutor 3-33

3.12. Language Barriers Between Children and Volunteers 3-46

3.13. Trained and Untrained Volunteers' Feelings About Various Aspects of Project Upswing 3-56

3.14. Rate of Response to Final Teacher Questionnaire, by City 3-62

3.15. Number of Times Volunteers Met With Children, by City 3-65

3.16. Replacement of Volunteers, by City 3-66

3.17. Teacher Preferences About Giving Direction to Upswing Volunteers, by City 3-69

3.18. Kinds of Guidance Teachers Were Most Willing to Give Volunteers, in Order of Rank, All Cities 3-70

3.19. Percentage of Teachers Providing Each Kind of Guidance or Assistance to Trained and Untrained Volunteers, All Cities 3-72

3.20. Teacher Opinion About Whether Trained, Untrained Volunteers Received Adequate Preparation for Tutoring, by City 3-77

3.21. Teacher Assessment of Children's Response to Tutors, by City 3-80

3.22. Volunteer Attitudes Towards Teachers, as Assessed by Teachers, by City 3-82

3.23. A Breakdown of Teachers Who Did or Did Not Understand Project Upswing and Their Role in It, by City 3-86

3.24. Teacher Preference About Working With Upswing Volunteers Again, by City 3-91

5.1. Distribution of Direct Costs to the Volunteers 5-3

5.2. Allocation of Variable Costs 5-6

5.3. Cost of Tutoring Per Mean Point Gain in Reading Score . . . 5-7

6.1. Distribution and Attrition Rate of Project Upswing Volunteers Trained and Untrained, by City 6-4

6.2. Dates Trained and Untrained Volunteers Left the Project, by City 6-7

6.3. Volunteers' Reasons for Leaving Project Upswing, by City 6-10

6.4. Rate of Attrition for Each Occupational Category 6-16

6.5. Occupation of Upswing Dropouts, by City 6-19

Volume I

Profiles of Participants and Their First Impressions of the Project

I. INTRODUCTION

SUMMARY OF PROJECT ORGANIZATION[1]

Project Upswing is a pilot study, sponsored by the Bureau of Educational Personnel Development (BEPD), U.S. Office of Education (USOE), designed to determine whether first grade children with minimal learning difficulties can be aided by volunteer tutors. A major goal of the project is to see whether children receiving this personalized assistance make more progress than a control group of children with similar problems who receive no volunteer aid. A second major comparison is between children tutored by volunteers with no special training and children tutored by volunteers who have received training in learning problems often found in first grade children and the techniques for overcoming these problems. Half of the volunteers received a total of 40 hours of preservice and inservice instruction. The other half of the volunteers received no formal instruction beyond a 3- to 5-hour orientation to the Upswing program. The volunteers in this second group were more dependent on their own individual resources and the guidance of the classroom teacher than those in the trained group. Both trained and untrained volunteers tutored from November 1971, when the children were identified for the project, until the end of the 1971-72 school year.

---

[1] This material provides a framework for the remainder of the report. It is included as a convenience for the reader, although to some it may be repetitive.

The project has been run as a cooperative effort between the university and the school system in four cities: Denver, Colorado; Oxford, Mississippi; St. Louis, Missouri; and San Francisco, California.[2/] The university department of special education holds the contract in all cases. Operations Research, Inc. (ORI) is serving as the outside evaluator of project effects, under separate contract.

The research design called for operation in all cities on a cross section of schools selected to reflect, insofar as possible, the social, racial, and economic population of the city at large. Typically, this cross section included between 8 and 14 schools. Oxford, however, has only two elementary schools, one for each of the consolidated school districts in the area. Both were Upswing schools, and because of their size, Oxford had roughly the same number of Upswing children as the other cities. First grade teachers at the selected schools were asked to participate by their principals.

Each city identified a group of approximately 150 children for the project. These children were divided on a completely random basis into three groups as equal in number as possible. One group was assigned to trained volunteers and one to untrained volunteers; the third, a control group, had no Upswing volunteer tutor. The project design called for children to be referred by their first grade teachers and then screened based on the results of a battery of tests covering IQ; reading, spelling, and arithmetic skills; level of visual-motor integration; behavior; and hearing and visual acuity. The tests

---

[2/] Originally, Cincinnati, Ohio, was to have participated as well, but the project there was discontinued in the fall of 1971. (See Operations Research, Inc.'s first interim report on Project Upswing, TR 700, January 1972, Section IV.)

were given, but, in general, too late to be used for screening purposes; essentially all teacher referrals were accepted (see Section II discussion of testing).[3]

Volunteers were recruited by the university project staffs, in cooperation with the public school systems, in August and September 1971. A total of 100 volunteers were to be recruited in each city—50 who would receive training and 50 who would not. Assignments to the trained or the untrained group were to be made by the city project staffs on a random basis. (The actual numbers of volunteers recruited in each city and their assignment to groups are discussed in Section III of this report.)

PURPOSE AND CONTENT OF REPORT

This report is part of the preparatory work of the evaluation of Project Upswing's effects in its first year of operation. The baselines for the evaluation are established here, namely:

- Learning characteristics of the Upswing children at the beginning of tutoring (results of IQ, achievement, and other tests given the children in the early stages of tutoring)
- Background characteristics of the volunteer tutors
- Background characteristics of the teachers involved in the project.

The major points to be determined at this time are:

- Whether the child population in fact fit certain parameters established in the project design (i.e., average IQ but "underachieving" in terms of expectations for average children entering first grade)
- Whether the groups of children (those tutored by trained volunteers, those tutored by untrained volunteers, and

---

[3] Not all children referred were tutored, however. As indicated above, one-third were put into the control group; others were not assigned tutors, or their tutors never came.

control children) were comparable at the start of the project in learning characteristics measured by the IQ, achievement and visual-motor development tests used

- Whether the trained and untrained groups of volunteers were comparable enough in background characteristics (such as age, education, experience), that the effects of Upswing training can be isolated with a reasonable degree of certainty.

Teacher characteristics are described because, although they probably cannot be controlled in a project of this nature, they undoubtedly enter into child progress or lack of progress.

In addition to the fundamental population profiles, the report describes teachers' and volunteers' attitudes toward the project in its early stages, based on their responses to "first impressions" questionnaires.

DATA SOURCES

As stated previously, a battery of tests was given, mostly during the fall school term, to all children identified for the project (including control group children.)[4/] The tests used were the Slossen intelligence measure; the Metropolitan Primer; the Wide Range Achievement Test, Level I; and the Beery-Buktenica Developmental Test of Visual-Motor Integration. The children also were checked for normal eyesight and hearing. The same tests (appropriate levels) were given again at the end of the school year. The first results are reported here. The two sets of scores are compared in the final report.

[4/] Testing was supposed to be completed before tutoring began, so that the results could be used for screening the child candidates and would provide a "pre-tutoring" profile of the children who were involved. Problems with obtaining the tests, child absenteeism, and organization caused testing to be delayed and extended over several months in most cases. Tests were still being administered in January 1972.

Background information on volunteers and teachers was obtained through project registration forms provided to the university project officers. A parent registration form was used to get information on selected socioeconomic and attitudinal characteristics of the Upswing children, but the response from parents was very poor. (It appears that in St. Louis the parent registration form was never even distributed.) Short questionnaires (the "first impressions" forms) were sent to the city offices for distribution to volunteers, teachers, and parents about 2 months after tutoring began. The volunteer and teacher questionnaires were designed to draw out attitudes toward Upswing and toward the preservice training and orientation given the volunteers. The parent questionnaire sought information on the attitudes of both parents and children; however, again, very few parent forms were returned to ORI. The attitude questionnaires were developed by ORI, subject to review and modification by the USOE contract monitor, the National Center for Educational Statistics (NCES), and the Office of Management and Budget (OMB).

DATA HANDLING

Data handling has presented some problems this year. Under the project design, all data had to be collected and sent to ORI by the small and very busy project staffs in the cities. These people are not accustomed to survey work. ORI has had no real control over data-handling procedures because of the contractual arrangements of this project and because we had no people on-site to take care of the many details.

The following is a brief review of procedures used by type of data. A description of problems encountered is presented for each case.

Child Test Data

All tests were administered and scored by Upswing staff in the cities and/or by graduate students hired for the purpose by the city directors. ORI provided each city office with a child record book in which both the pre- and post-tutoring test results were entered. The books were sent to ORI after the

PS 007122

first results were in, so that the scores could be put into our computer data files. The books were then returned to the cities for the final round of testing.

Two major types of problems occurred—incomplete data and delays. First, only the reading portion of the WRAT was given in San Francisco. In addition, it appears there was some confusion in the scoring of the Metropolitan Primer in that city, so that the results cannot be used. The Beery Buktenica was not given in Denver because the project office was unable to get copies of the test. These difficulties are discussed in Section II.

As mentioned previously, there were serious delays in the completion of the first round of testing in Denver and San Francisco; the child record books were not received from those cities until March 1972. This appears to have been caused by difficulties in organization, scheduling in the schools, and child absenteeism. It is not known to what extent delays resulted from insufficient staff to do the scoring and recording for ORI. In addition, there were incomplete forms in the record books returned by Oxford and St. Louis (because children were absent when various tests were given).

The delays in completing the "pre-tutoring" tests have had two repercussions. Most importantly, they obscure the effects of tutoring because there is no accurate indicator of the child's starting level. Second, testing delays have contributed to slowing the steps toward evaluation. The task of developing pre-tutoring learning profiles should have been completed earlier, for feedback to the cities on the nature of the children they were working with and to reduce the analysis and writing burden in the final months of the evaluation.

ORI recognizes that special problems were encountered this year. It takes time to get any new project running smoothly, particularly one that involves so many different types of people and organizations. Upswing operates in the real world, not under laboratory conditions. The tests were not received from the publishers early enough in some cases. There were many activities other than testing going on in the project as well as in the elementary schools involved. The Denver director was not brought into the project until after school started, and the San Francisco school system was troubled by conflict over desegregation. In addition, of course, some delays are inevitable in giving four different tests each to approximately 150 children dispersed over a school system (in 19 schools in Denver). It is necessary to obtain parents' permission first, and of course children may be absent. Nevertheless, it is believed the situation could be improved with careful planning and an earlier starting date in the 1972-73 school year.

Registration and First Impressions Forms

It was planned that all Upswing forms would be issued under the name of the university in each city and would be distributed by the city project staffs. Follow-up also was to be conducted by the city staffs. The directors felt that communications from ORI and USOE would likely threaten, confuse, or alienate the Upswing volunteers, teachers, and parents. It was felt that the data returns would be greater if the forms were distributed and collected by a familiar organization.

The cities have not documented how, when, and to whom the forms were distributed, or how and when follow-up was conducted and who was contacted. It appears that procedures were quite informal and that it may have been difficult to get people to return forms. Registration data dribbled into ORI from October 1971 to May 1972. First impressions questionnaires came in from January through June 1972. ORI conducted its own follow-up on volunteer and teacher nonrespondents to the latter instrument, since it appeared after close to 2 months (the forms were sent to the cities the first week in January) that the returns would be so small the evaluation would be seriously impaired. The follow-up wave went out with a letter and pre-addressed, postage-paid return envelopes attached on March 13, 1972. Finally, adequate returns were received.

Postage-paid, pre-addressed envelopes should have been attached by ORI to all forms for return directly to the evaluation team. It is believed that some delays resulted from forms being held in the city offices until enough for a package accumulated and someone had time to mail the package. It is also strongly urged that, unless ORI could have a data-handling agent on-site in each city, someone directly responsible to the evaluation director (paid by ORI) it would be better to send out all forms from this office. A special effort could be made to guard against the feelings of threat, confusion, and hostility feared by the project directors.

Two major problems can be related to overly loose questionnaire handling procedures: (a) incomplete data, resulting in delays in the progress of the evaluation; and (b) difficulty in computing response rates. With much effort by all involved, over an extended period of time, good response was achieved on the volunteer and teacher registration and first impressions. None of the parent data can be used in the evaluation, however, because so few forms were received.

II. UPSWING'S CHILD POPULATION

PURPOSE AND CONTENT

This section describes selected learning-related characteristics of the children in Project Upswing. The information presented has two major purposes here:

- To establish whether the child population in fact fit within the parameters stipulated in the project design (namely, whether the children were of average intelligence, but experiencing difficulty learning to read, while demonstrating no severe perceptual or cognitive pathology)
- To establish whether the three groups of children involved (those tutored by trained volunteers, those tutored by untrained volunteers, and the control group children) were similar enough in initial characteristics for valid comparisons among the groups to be made.

The "group learning profiles" have three elements: IQ, as an indicator of ability or potential to achieve[1/]; reading achievement level; and level of visual-motor integration, as an indicator of psychomotor development. Each child involved was measured on each of these elements, or characteristics, by means of a formal test.

The data are used in the final evaluation of first-year project outcomes as baselines from which measures can be derived for two of the three dependent variables on which the evaluation rests—change in achievement (with reading of primary interest) and change in psychomotor behavior.[2/]

The section also contains a review of background information about children in Denver who were assigned tutors. These data were provided by parents who returned child registration forms. ORI planned to describe the children in the experimental groups in terms of background characteristics as well as learning characteristics. It also was planned to attempt to determine what relationships, if any, appeared to exist between change in achievement, etc., and selected characteristics such as school experience prior to first grade, ability to establish relationships with other children, level of parents' education, and economic status of family. This kind of analysis cannot be attempted because so few parents returned forms. The Denver data were sufficient for presentation, although they will not be used in the evaluation.

[1/] ORI, as well as USOE and all city project directors, recognizes the limitations of the IQ test as a measure of ability, particularly for children this age identified by apparent learning difficulties. An IQ test was used as the best available method of ensuring that the Upswing children had "average ability," a constraint of the project design. As it turned out, children with tested IQs both above and below average were accepted into the project; the test results generally were not used for screening, as described in this section under "Parameters of the Population."

[2/] No attempt was made to obtain an objective measure of change in children's self-esteem, the third dependent variable of the evaluation. The teacher and volunteer who worked with each child were asked to assess his change in self-esteem on the final questionnaire. These subjective judgments are described in Volume II.

PARAMETERS OF THE POPULATION

How the Children Were Selected

First grade teachers in the participating schools nominated children for Project Upswing based on their professional judgment after observation of their pupils during the opening weeks of school. In accordance with the project design, they were to choose children of average ability who were not achieving at the normal first grade levels, particularly in reading. Children with serious organic dysfunctions were not to be included among the candidates. A version of one of the Burks Behavior Rating Scales generally was used by the teachers as a screening aid; however, the scale was of limited utility since it focuses on "acting out" behavior characteristic of children with neurological impairments.

The city directors then selected children from among those nominated, according to the project needs. Their criteria included geographic distribution of cases, availability of tutors by area, socioeconomic background of child, whether a parent would give permission for the child to be in the project (including permission for testing, etc.). After the children were selected for the project, pyschoeducational testing was performed. Hearing and vision tests also were administered; all Upswing children were to be within the range of normal functioning.

Because of delays in testing, the Upswing test data were not used by the individual projects to screen children as was originally intended. Although the tests were supposed to serve as screening devices, they were used only to form the basis for the evaluation of project effectiveness. Screening on IQ was used in Oxford and, partially, in St. Louis. Beyond that, the tests were not used for screening in any location. ORI understands that hearing and vision tests, for example, were still being given in January. Thus these tests were useless as far as the project is concerned, unless the volunteers were informed of any impairments detected. We do not know if this was done. Nor did we receive these test results; thus it is unknown how many, if any, Upswing children had serious impairments of this kind.

It is not clear to what extent the tests were intended to be used for diagnosis of learning difficulties. It appears that they were used this way only in Oxford, where the project director went over the results, giving diagnostic help, with volunteer tutors who asked her to do so. ORI recognizes that individual diagnosis is time-consuming and expensive. However, the test results were available, and it is difficult to see how educational intervention can be effective without diagnosis somewhere along the way. Perhaps Upswing's overall intent is modest—to use volunteers to work with undiagnosed, subjectively-screened children. If this is so, it should be clearly spelled out as such by the USOE.

In some cases volunteers were able to analyze children's needs on their own; others received help from principals, teachers, or (in San Francisco) learning specialists affiliated with the project. It is interesting that the Upswing test results were not made available to the teachers. ORI received many comments about "no feedback on tests" during the interviews with teachers this spring.

If testing is to be a part of Upswing's final implementation, the evaluation team would recommend that the directors work out some more organized scheme of assisting volunteers with diagnosis, which would increase the benefits from the expensive process of testing. Otherwise it is best to continue not using the test data for diagnosis. This point should be cleared up before the second-year evaluation.

Although the tests did not serve as screening devices, the results can be examined to assess the accuracy of the subjective screening procedures used. In addition, test scores on the Slossen and on the VMI will indicate probable cases of severe perceptual or cognitive pathology that are outside Upswing's scope. These cases will not be removed from the population but the impact of the project on them will be noted.

Population Size

Figure 2.1 shows a count, for the project as a whole, of the children in each of Upswing's three child groups (children with trained volunteers (T),

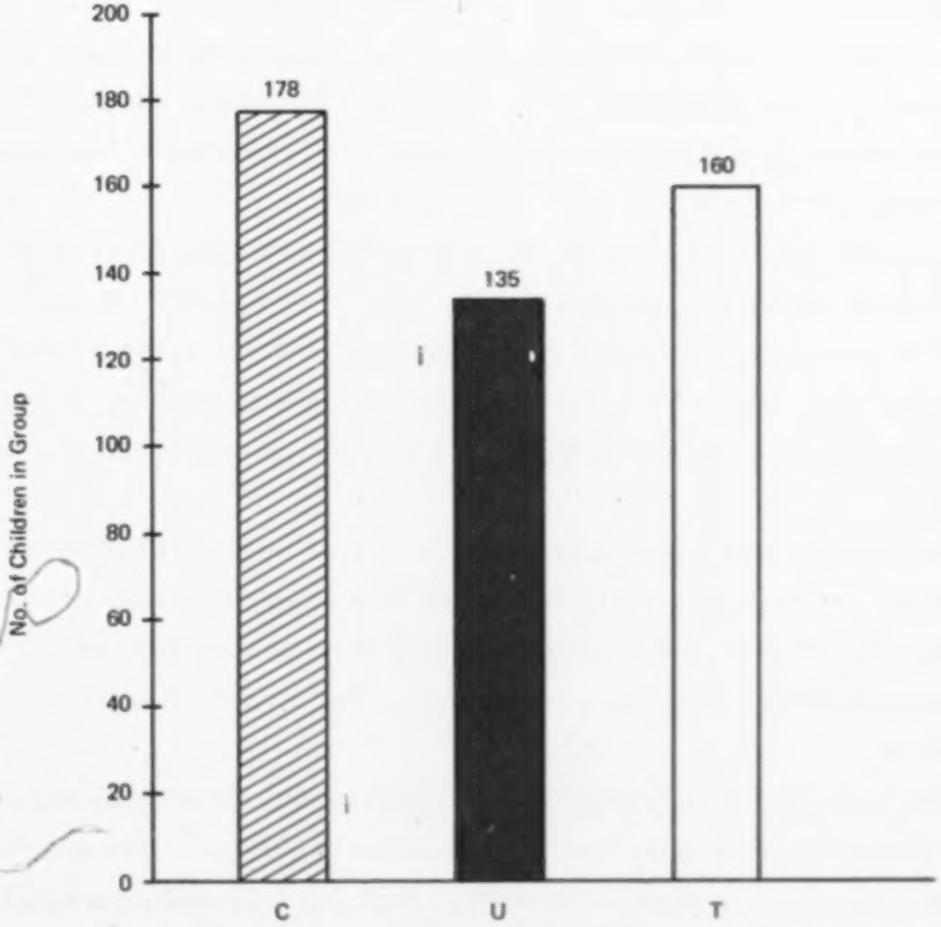


FIGURE 2.1. NUMBER OF UPSWING CHILDREN WITH USABLE TEST DATA, BY STATUS GROUP

(Total number of children = 473.)

children with untrained volunteers (U), and control—children with no volunteer tutors (C)). A total of 473 children are represented in the figure. This number is not the actual number of children who were involved in the project; rather it is the number on whom test data were received and who were still participating when the test data were coded. Twelve cases were not included in the count because of insufficient data. Other children who were tested transferred out of the Upswing schools, were never assigned volunteers, or were excluded because their volunteers attrited and were not replaced. It was hoped that a total of closer to 600 cases would be available for analysis (about 200 per group), as called for in the project design. Unreported attrition (children and volunteers) and incomplete final test data are expected to reduce the number of cases even further.

It can be seen in the figure that there are considerably fewer children in the group assigned to untrained volunteers. This probably occurred because slots for trained volunteers were filled first, so that training could begin, leaving fewer untrained volunteers to be assigned to children, and/or because more untrained volunteers attrited. (The latter reason is probably most important.)

The reduced and uneven group sizes will pose some difficulties for the evaluation. For one thing, ORI will not be able to use Automatic Interaction Detection (AID) to identify the conditions that have greatest impact on the dependent variables—change in achievement, self esteem, and psychomotor behavior.

Figure 2.2 gives the distribution by status group for each Upswing city. San Francisco has a much smaller population of children. The director's "Mid-Project Report Form" indicates that they had difficulty getting referrals from teachers. They also ran into problems securing parental permission for children to be tested, because the schools did not have correct home addresses

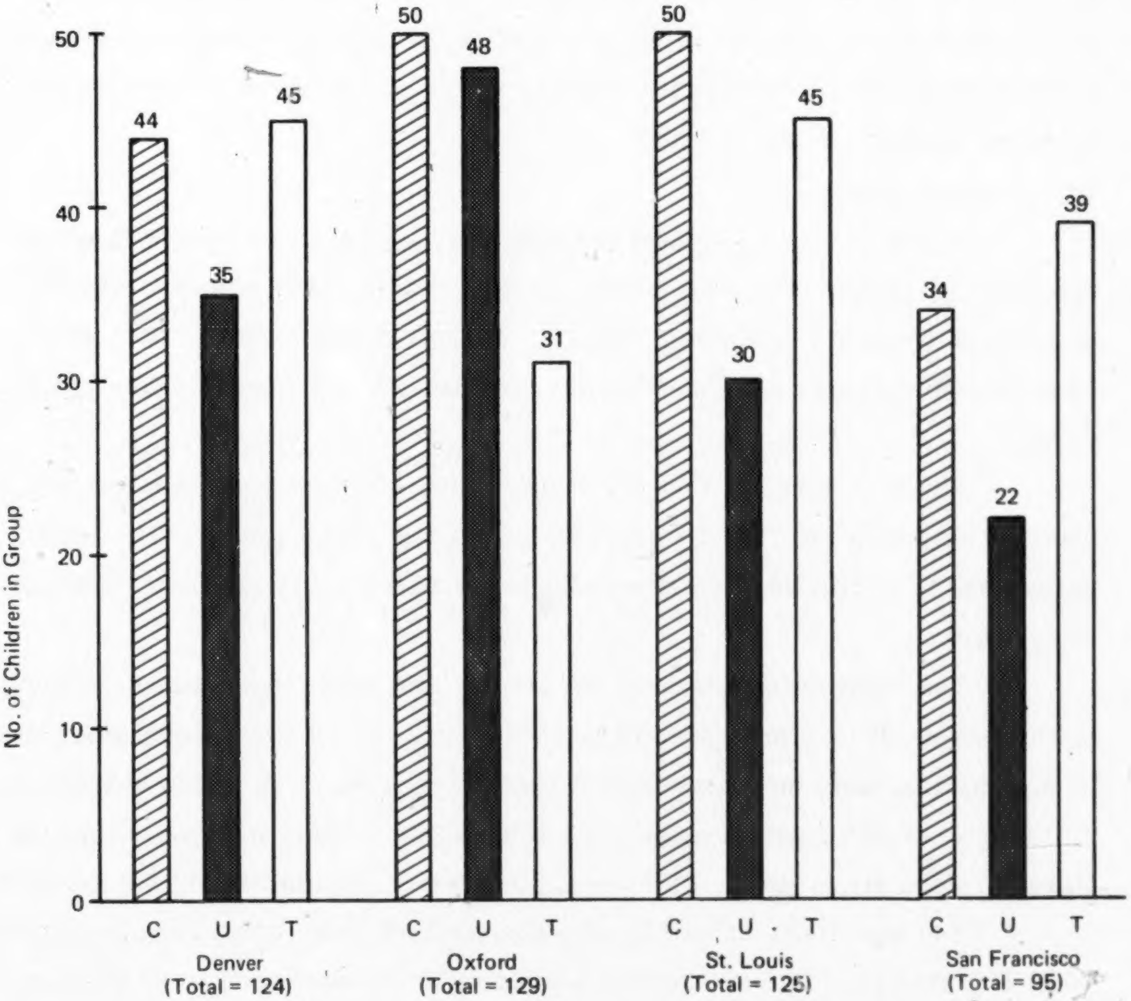


FIGURE 2.2. NUMBER OF CHILDREN WITH USABLE TEST DATA, BY STATUS GROUP AND CITY

and/or telephone numbers for many children.[3] The other cities have total populations of comparable size. Denver and Oxford have similar distributions over the three groups, with, like San Francisco, the fewest children in the U group (children with untrained volunteers). The Oxford distribution of children by status group runs counter to this trend. ORI has no ready interpretation of this phenomenon. It is not related to greater attrition of college student volunteers because the percentages of student volunteers in Oxford's trained and untrained groups are about equal.

The Children's Ages

Figure 2.3 is a graph of the distribution of ages of Project Upswing children, by group. The age spread is considerable. The points are plotted at 3-month intervals from age 6 years, 1 month, to age 7 years, 10 months. Each point represents all children with birthdates ± 1.5 months of the plotted value.

Figure 2.3 shows that the three groups of children are similar in age distribution, with the C and T groups particularly well matched. The lower percentage of U children who are about 6 years, 4 months old is not considered significant.

The children's mean age (all groups combined) was 6 years, 8 months in November 1971, when Upswing tutoring began. Moreover, about one-fifth of the children were age 7 or older at that time. (The three-group average of children >7 is 22%, with a range from 20% to 26%.) Thus it appears that the Upswing population may be older than the average population of first graders.

The age distributions by city (Figure 2.4) show considerable variance. Most importantly, the San Francisco and Oxford children tend to be younger

---

[3] According to the director's report (p.11), they received 166 referrals; however they were unable to contact the parents of 57 of these children, and the parents of three children refused to permit them to participate in Upswing. Thus they began with a total of only 106 children, 44 fewer than called for in the project design. They have lost a good number of children represented in the figure through volunteer/child attrition.

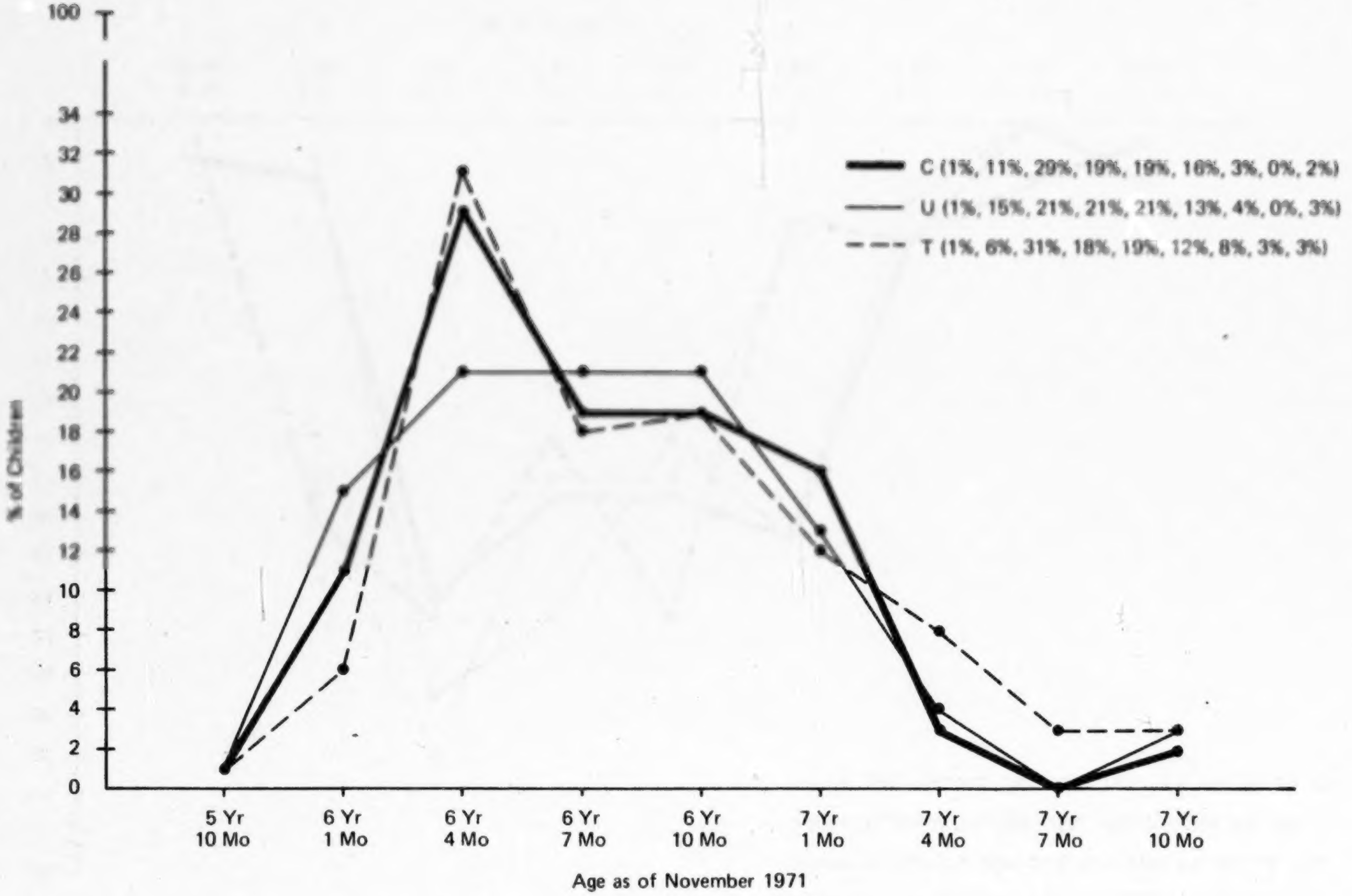


FIGURE 2.3. CHILDREN'S AGES BY STATUS GROUP

(Percentages do not add to 100% because of rounding error.)

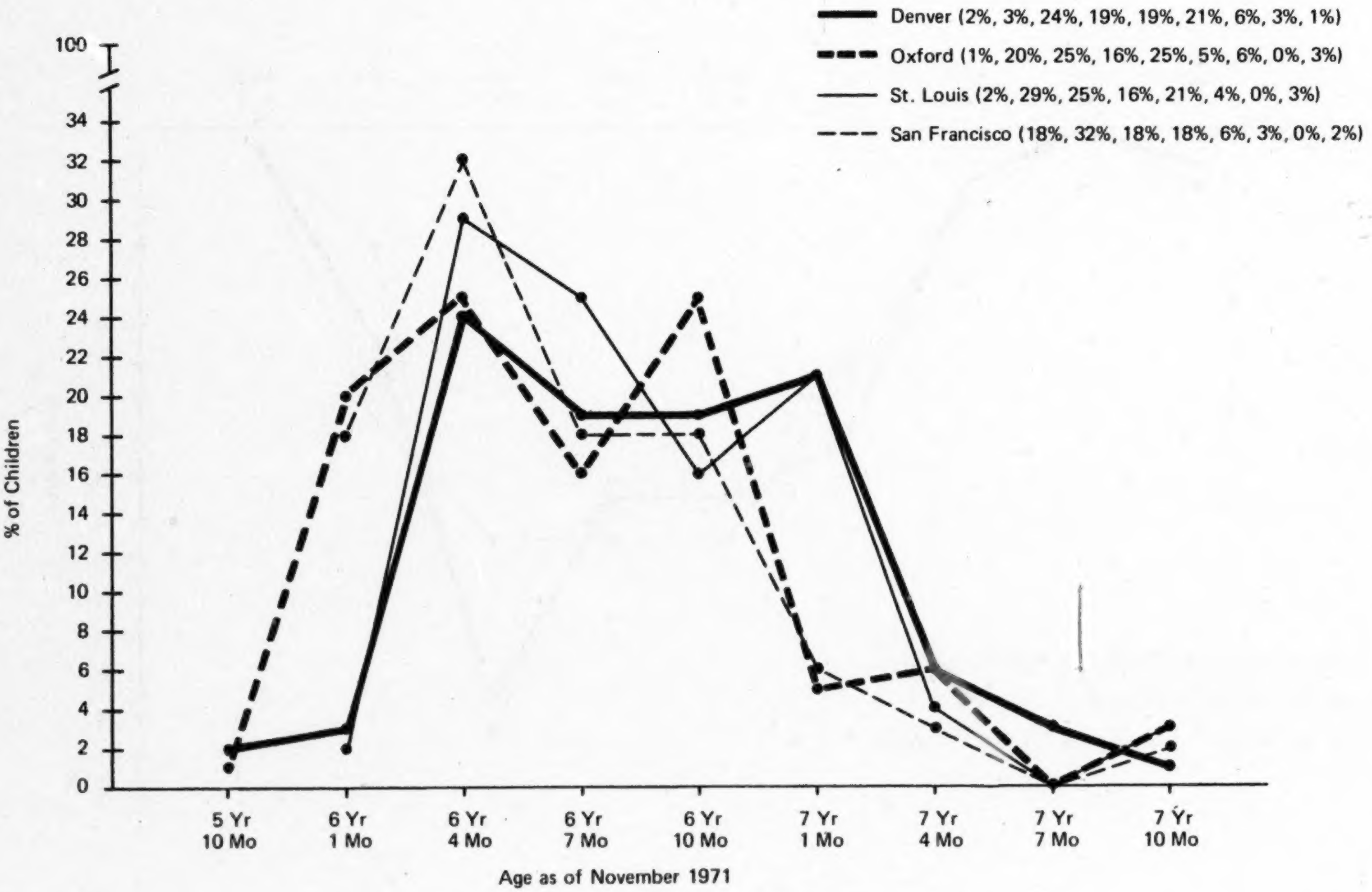


FIGURE 2.4. CHILDREN'S AGES, BY CITY

(Missing data: 2% Denver, 3% San Francisco; percentages do not add to 100% because of rounding error.)

than those in Denver and St. Louis. Fifty percent in San Francisco, and 46% in Oxford, were less than 6½ years old when tutoring began, as opposed to about 30% younger than 6½ in the other two cities.

The age data are important in the analysis of achievement test results (WRAT scoring allows for chronological age, Metropolitan scoring does not) and visual-motor integration test results. Age is considered in the presentation of test score distributions later in this section.

DATA SOURCES

Four tests were selected to operationally define the learning characteristics of the Upswing children: the Slossen IQ; the Wide Range Achievement Test (WRAT) Level I; the Metropolitan Achievement Series; and the Beery Buktenica Developmental Test of Visual-Motor Integration (VMI)[4/]

The Slossen IQ Test

The Slossen is an individual intelligence measure that yields a single, composite score more representative of verbal ability than performance. It is relatively quick and easy to administer and score—two reasons it was selected for use in Project Upswing.

In addition, the Slossen claims a standard measurement error (SE) of only 4.3 IQ points, as opposed to a 10-point SE on the standard Wechsler Intelligence Scale for Children (WISC). This means that the Slossen is very accurate and reliable; a difference of seven or more IQ points would be significant in 90 out of 100 cases.

It should be noted that Slossen scores cannot be equated with the scores yielded by more familiar IQ tests such as the WISC or California Test

---

[4/] A behavior rating scale also was used (in all cities except San Francisco) in the first step of child nomination by teachers. However, these data cannot be employed in the evaluation. The instrument, chosen before the project got under way at a meeting of the city project directors and USOE, was designed to detect neurological handicaps. No scoring and interpretation guide is available, apparently because the instrument obtained for Upswing use was a preliminary version that has subsequently been refined and standardized. Author-publisher permission to use the scale was not obtained.

of Mental Maturity (CTMM). An IQ of only 75 points on the Slossen would be equivalent to an IQ of 85 on the WISC, while a Slossen score of 149 would be equivalent to a WISC score of 130. This difference is caused by the Slossen's unusually large standard deviation—24.7, as opposed to the more common 15 or 16 points.[5]

The WRAT

Upswing administered the latest (1965) version of this standard, which has been in use since 1937. There are two levels—one for children from 5 up to 12 years old and the other for children 12 years old through adults. Level I of course was used for Upswing.

The complete battery covers all the basic school subject areas of reading, spelling (which subtest encompasses writing), and arithmetic. All three subtests were given in every city except San Francisco, where only the reading portion was used. The tests measure proficiency in sensory-motor skills required in each school subject area. Reading proficiency, for example, is measured in terms of ability to recognize and name letters and words.

The WRAT scales correlate quite highly with intelligence in normal populations (in the range of $r = .70 - .80$). It is expected that this correlation will be considerably lower for the Upswing population.

The accuracy of raw WRAT test scores (SE) is estimated at about 8% of the total variance of scores. In Upswing, this means that more than ± 4 points will be considered significant.

The Metropolitan Achievement Test Series

This is a series of easy-to-administer, inexpensive, group achievement tests that can be machine-scored. One major reason the series was included as part of the Upswing battery was to see how comparable its results would be with the more expensive WRAT battery, since economics are always a concern in educational projects, particularly those involving volunteers.[6]

---

[5] The Slossen's larger standard deviation was not taken into account when Upswing's criterion IQ range of 85-110 was established. The 85-110 bounds approximate the average range on traditional measures (SD ± 15).

The Metropolitan Primer battery, designed for kindergarten and beginning first grade children, was given as one of the initial Upswing tests. (The Primary Level I tests, designed to measure achievement from the middle of first grade through the middle of second grade was part of the post-tutoring Upswing battery.)

On close examination of the Metropolitan series ORI feels that several significant deficiencies exist. The most important weakness of the series appears to be the use of machine-score answer sheets, which require a high level of visual-motor integration for completion. The children must place pencil marks in highly specific locations on the answer sheet and avoid all stray marks. ORI considers this requirement unrealistic when testing any first grade population, let alone a population selected on factors likely to be mediated by visual-motor difficulties. A second criticism is the poor quality of documentation presented by the authors. The methods of obtaining standardization data appear suspect because of the small number in the "representative" population and the fact that "representative" is not defined by the authors.

The standard error has been computed in grade equivalents of -2 (2 months). Thus any differences exceeding 2 months will be considered significant.

The Developmental Test of Visual-Motor Integration

This test, often referred to as the "VMI" or the "Beery-Buktenica," is described in the scoring manual as "basically a tool for educational assessment," although it is widely employed as a clinical diagnostic device. It was designed primarily for use with preschool and primary age children.

---

[6] Another reason for including the Metropolitan seems, potentially, to be in conflict. It was felt that two sets of results would provide a better basis for judgments about the children's initial achievement levels and any changes observed after the tutoring experience.

In brief, the test measures functional integration of perceptual and motor processes in terms of a child's ability to give a specific motor response to printed symbols. The child is presented with a series of 24 geometric forms to be copied on paper. The forms are presented in order of increasing difficulty.

The VMI was selected for use in Upswing because the collective experience of researchers indicates that learning difficulties are commonly associated with problems of visual-motor coordination, although these are often temporary problems caused by slow maturation or transient functional impairments that slowly resolve themselves. The test scores, which indicate a child's level of coordination in chronological age equivalents, have a higher correlation with reading achievement in first grade than does verbal IQ. Thus, for the Upswing population, one would expect lower VMI scores than for the general population of children with average ability. In a normal population of children aged 2 to 15, the VMI correlates .89 with chronological age. It is expected that the VMI age equivalents for Upswing children will have a lower correlation with actual age.

Reliability and error measurements for the VMI are not included in the administration and scoring manual—a serious omission. ORI is obtaining a monograph that includes these measures.

TEST ADMINISTRATION AND SCORING

Children with Upswing volunteers, and the control children, were tested primarily between November and December 1971. Some testing, however was carried on through January 1972. ORI feels this long period of pretesting will spuriously reduce the magnitude of measured effects. Some children's scores no doubt reflect the "advantage" of later testing. As far as ORI knows, this effect is random over the three groups of children.

Three of the four tests used in Project Upswing (the Slossen, WRAT, and VMI) are administered and scored on a one-to-one basis with the child. These tests were chosen because, when properly administered and scored, they are far more sensitive than equivalent group tests.

The loose structure of the one-to-one situation, however, allows the tester to probe the child for responses. Probing requires considerable skill in order to avoid leading the child or discouraging him. The skilled tester can put the child at ease and excite his interest. In the same situation, a poorly trained or inexperienced tester can threaten a child, causing withdrawal and poor performance. This is particularly likely when the child is in some way offensive to the tester. The inexperienced tester is often unable to detect and control his own rejection of the child, but the child usually senses it immediately. Conversely, a poorly trained or inexperienced tester may prompt the child's responses or too readily interpret them as correct.

Scoring individual tests also is more subjective than scoring group tests. Very often, as in the VMI, responses can be infinitely varied but must be interpreted accurately as either acceptable or not acceptable on the basis of subtle, complex criteria. Scoring is not always as clear cut as with the objective, machine-scored tests. It requires advanced training, sensitivity, and experience on the part of the tester before consistency and accuracy are possible.

It is not possible for ORI to evaluate the ability of the many people who have served as Upswing testers. However, it is known people with varied amounts of training and experience served in this capacity in the four cities, and several cases of inadequate tester performance have been reported by project directors. An attempt has been made to correct the resulting inaccurate scores, but it may be that some of the reported scores are inaccurate. The overall effect of using inexperienced or poorly trained testers is to reduce the overall accuracy of the present evaluation.

SUMMARY OF TEST RESULTS

On the whole, the children fall within the population constraints imposed by the project design. The test results for the three groups of children (controls, those with trained volunteers, and those with untrained volunteers) are comparable for purposes of evaluation. The cities differ in some test outcomes. Highlights of the test results follow.

Intelligence[7]

- More than 96% of Upswing children tested as having an IQ in the average range. The mean score for the total population is 97.5. The Oxford children, as a group, had a lower mean IQ than the children in any other city, and those in Denver had a slightly higher mean score than the other children.

Achievement

- The age-adjusted WRAT shows that about 70% of the Upswing children were below average in reading achievement at the time they were tested. Almost half scored at or below the 20th percentile (below 80% of children their age). The Metropolitan Primer scores were lower, on the whole, than the WRAT scores. Clearly, the Upswing population is an underachieving group of children.
- Strong differences are evident when the WRAT results are compared with the Metropolitan results by city. The only constant is that Oxford children scored lowest on both tests. The two tests appear to be measuring on different criteria.

---

[7] The project design specified children with average IQ. However, in all cities, some children who tested above or below average are involved. The city directors believe that the low-scoring children probably were handicapped (in terms of performance) by cultural differences, including language. They also believe that above-average children who are experiencing difficulty in school fit within Upswing's scope. USOE and ORI agree with the directors on these points. Since IQ is not a dependent variable of the evaluation, this departure from the study design poses no problems. ORI

Visual-Motor Integration

- Sixty-nine percent of the Upswing children tested as functionally immature. The mode VMI age equivalent was about 5½ years.

TEST RESULTS

The data are presented in two ways, by status group and by city. "Status group" refers to the children's assignment to volunteers: control children with no volunteers (C), children with untrained volunteers (U), and children with trained volunteers (T). Line graphs permit the test-score distributions to be compared readily.

The following procedure was used to reduce the number of data points to meaningful categories. The range of raw scores on each test was divided into 10 equal intervals for graphic display and cross tabulation. The center value for each interval was used as the plotting point. For example, if a set of scores ranged from 10 to 50, it would be divided into 10 four-point intervals; then all cases in the interval of, say, 10-14 would be plotted as the score value of 12, while all in the interval 15-19 would be plotted as 17, etc. In all cases, the intervals are small enough that the center value is within one standard error of all actual scores included in the interval.

Where percentiles are presented, they are based on distributions of raw scores treated as described above. Because of the nonlinear relationship between raw scores and percentiles, the plots for percentiles are not equal interval.

All points relevant to one city or status group have been connected by lines simply to indicate the rough shape of the distribution. It should be noted that these lines do not represent a continuum of data points.

---

will, however, attempt to determine whether IQ seems to be related to any measured change in reading achievement, esteem, and psychomotor control.

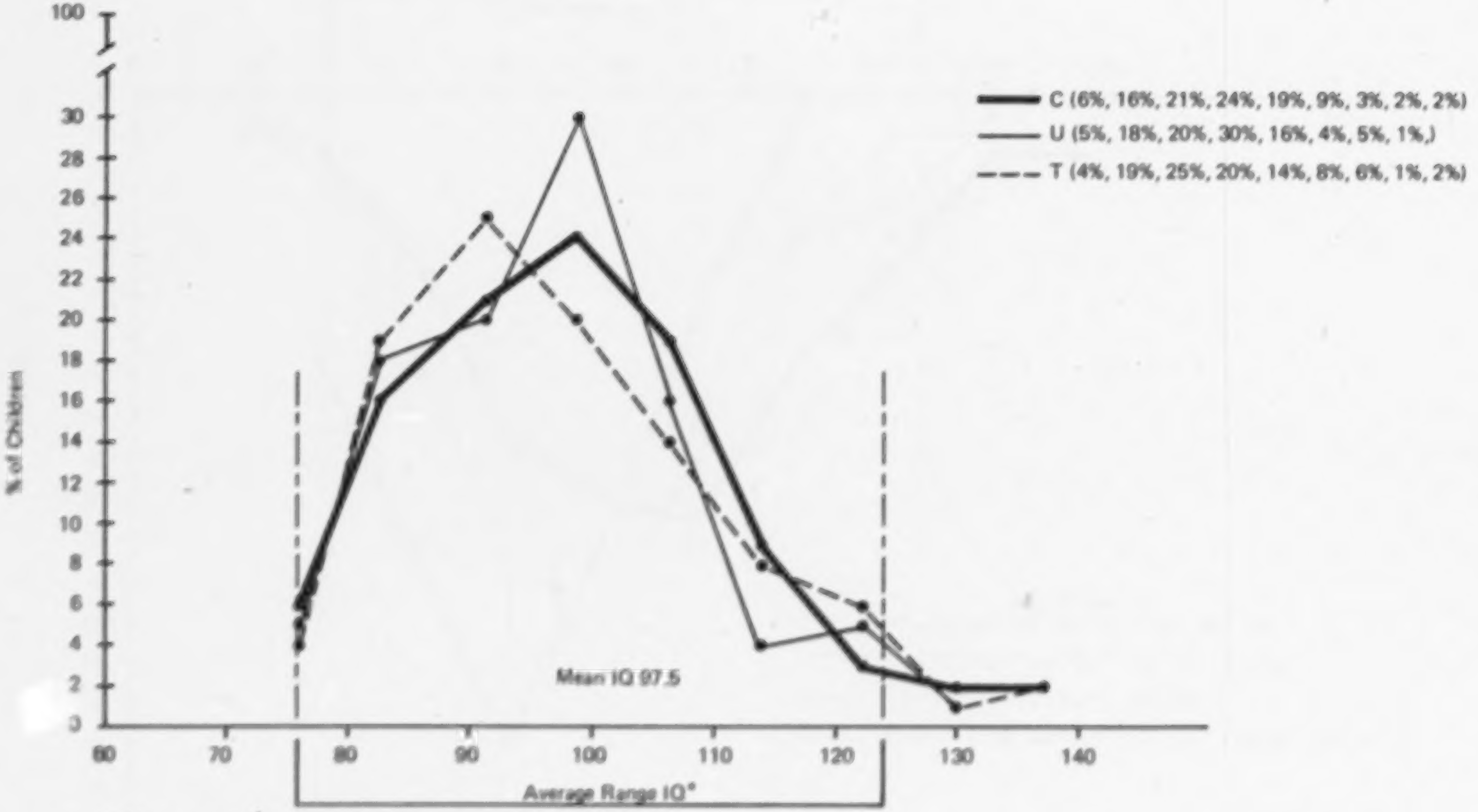
Intelligence

The Slossen results indicate that almost 100% of the Upswing children were within the range of average intelligence (approximately 76 to 124 points on the Slossen). In Figure 2.5, only 5% or less of any of the three groups (C, U, and T children) scored outside the average range. The curves for the groups are comparable.

Figure 2.6 points up variance between cities in intelligence score distribution. Oxford's children tend toward the lower end of the average range, with scores in the interval from 72 to 110. All three measures of central tendency are very close to 90. The most noteworthy point about the Oxford results is that, contrary to expectations, relatively few of the children (less than 13%) tested as having below-average IQ.[8/] Previous experience had shown that children from rural Lafayette County, Mississippi, tended to perform poorly on IQ tests. Thus, with the Upswing IQ limits set at 85 and 110, the Oxford project director requested and received authorization to include children who scored up to 10 points under the lower limit. However, since the Slossen has a standard deviation of 24.5 points most of the Oxford children in fact tested as average without allowance for cultural bias. The test bore out the teachers belief that the children they referred were of average ability although achieving at a below-average level. This speaks well for the Slossen as an instrument for use with so-called "culturally-deprived" or "disadvantaged" children. (The test has been used with disadvantaged children in Denver, but its appropriateness for that group has not been documented.)

The San Francisco and Denver child IQ distributions approximate normal curves, with the San Francisco mean close to 100 and Denver's close to 105. Both cities have very small percentages of below- and above-average scores, although Denver's percentage above average is greater than that of any other city.

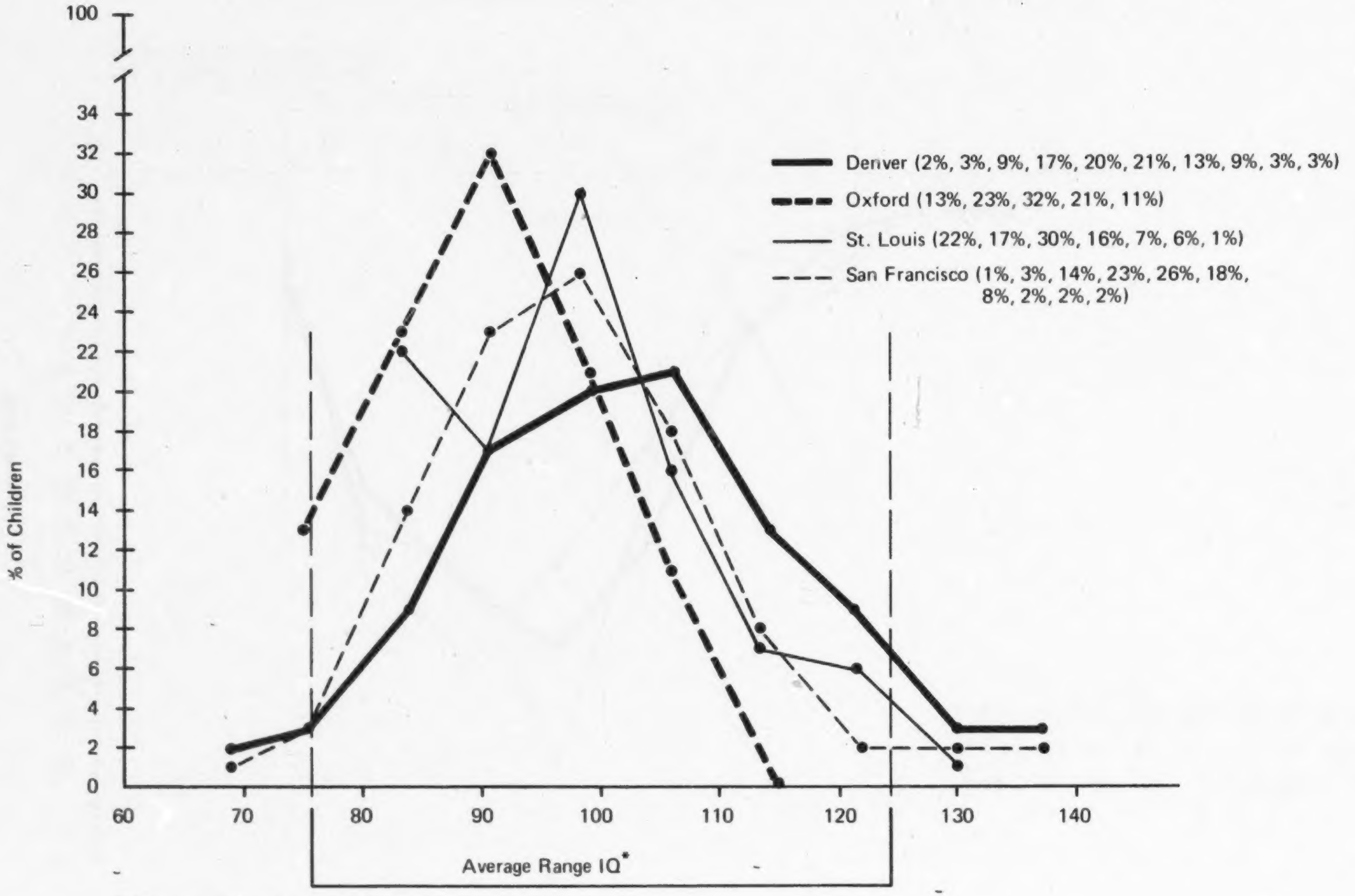
[8/] Remember that Upswing's criterion IQ bounds were selected based on the traditional IQ measures that set average at 100 ± 15. These limits are not appropriate for the Slossen, whose average range is 100 ± 24.5.



*This represents ± one standard deviation on the national norms.

FIGURE 2.5. CHILDREN'S SLOSSEN IQ SCORES, BY STATUS GROUP

(Missing data: 2% T. Percentages do not add to 100% because of rounding error.)



*This represents ± one standard deviation on the national norms.

FIGURE 2.6. CHILDREN'S SLOSSEN IQ SCORES, BY CITY

(Missing data: 1% Denver, 1% San Francisco.)

Achievement

Achievement level was measured by both the WRAT and the Metropolitan Primer. WRAT results for the total population are presented in Figure 2.7. The chart shows that the children were underachieving in terms of what the WRAT measures when they took the test: 72% of the children for whom data are available (N = 473) scored below the average range. A small percentage of children tested above average (6%), and about one-fifth ([illegible]2%) tested as average achievers in reading.

It should be noted that the WRAT scoring procedure includes an age adjustment. This makes the test both fairer to the children and a better evaluative and diagnostic measure. Since the percentiles are based on school achievement norms by age, a 6-year-old is compared with a sample of other 6-year-olds. That child would receive a higher percentile rank than a 7-year-old who made the same raw score. Thus the WRAT data permit a more refined conclusion: most of the Upswing children are underachieving for their ages. We know that those who tested average and above in reading achievement are not simply demonstrating an age advantage.

It also should be noted that the children who tested as average and above still could be underachievers in the classroom for a variety of reasons. It will be remembered that the test was not used for screening.

Comparability of the Children by Status Group. The WRAT results by status group of children are presented in a somewhat unorthodox way. For this analysis, effect of age on the children's scores was removed. This was done by assigning all Upswing children to the norm age range of 6 years, 0 months to 6 years, 6 months, for the purpose of determining percentiles from raw scores. This range was suggested by the WRAT documentation. Based on the test's standardization samples, average reading achievement in the second month of first grade (the closest point to the time of Upswing testing available in the WRAT documentation) equates with an age of 6 to $6\frac{1}{2}$ years.

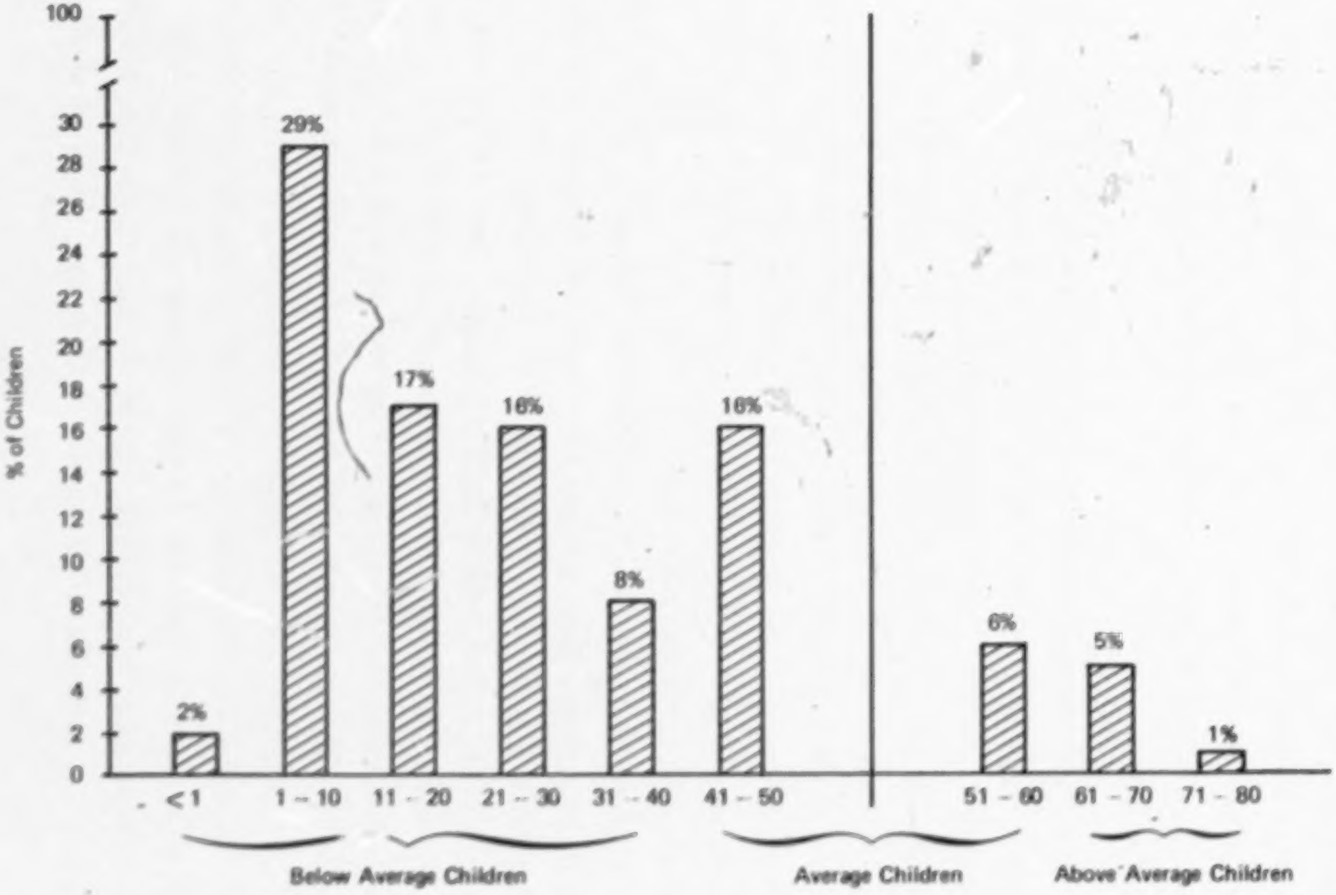


FIGURE 2.7. PERCENTILE RANKS ON THE WRAT READING SECTION—ALL CHILDREN

Achievement

Achievement level was measured by both the WRAT and the Metropolitan Primer. WRAT results for the total population are presented in Figure 2.7. The chart shows that the children were underachieving in terms of what the WRAT measures when they took the test: 72% of the children for whom data are available (N = 473) scored below the average range. A small percentage of children tested above average (6%), and about one-fifth (22%) tested as average achievers in reading.

It should be noted that the WRAT scoring procedure includes an age adjustment. This makes the test both fairer to the children and a better evaluative and diagnostic measure. Since the percentiles are based on school achievement norms by age, a 6-year-old is compared with a sample of other 6-year-olds. That child would receive a higher percentile rank than a 7-year-old who made the same raw score. Thus the WRAT data permit a more refined conclusion: most of the Upswing children are underachieving for their ages. We know that those who tested average and above in reading achievement are not simply demonstrating an age advantage.

It also should be noted that the children who tested as average and above still could be underachievers in the classroom for a variety of reasons. It will be remembered that the test was not used for screening.

Comparability of the Children by Status Group. The WRAT results by status group of children are presented in a somewhat unorthodox way. For this analysis, effect of age on the children's scores was removed. This was done by assigning all Upswing children to the norm age range of 6 years, 0 months to 6 years, 6 months, for the purpose of determining percentiles from raw scores. This range was suggested by the WRAT documentation. Based on the test's standardization samples, average reading achievement in the second month of first grade (the closest point to the time of Upswing testing available in the WRAT documentation) equates with an age of 6 to $6\frac{1}{2}$ years.

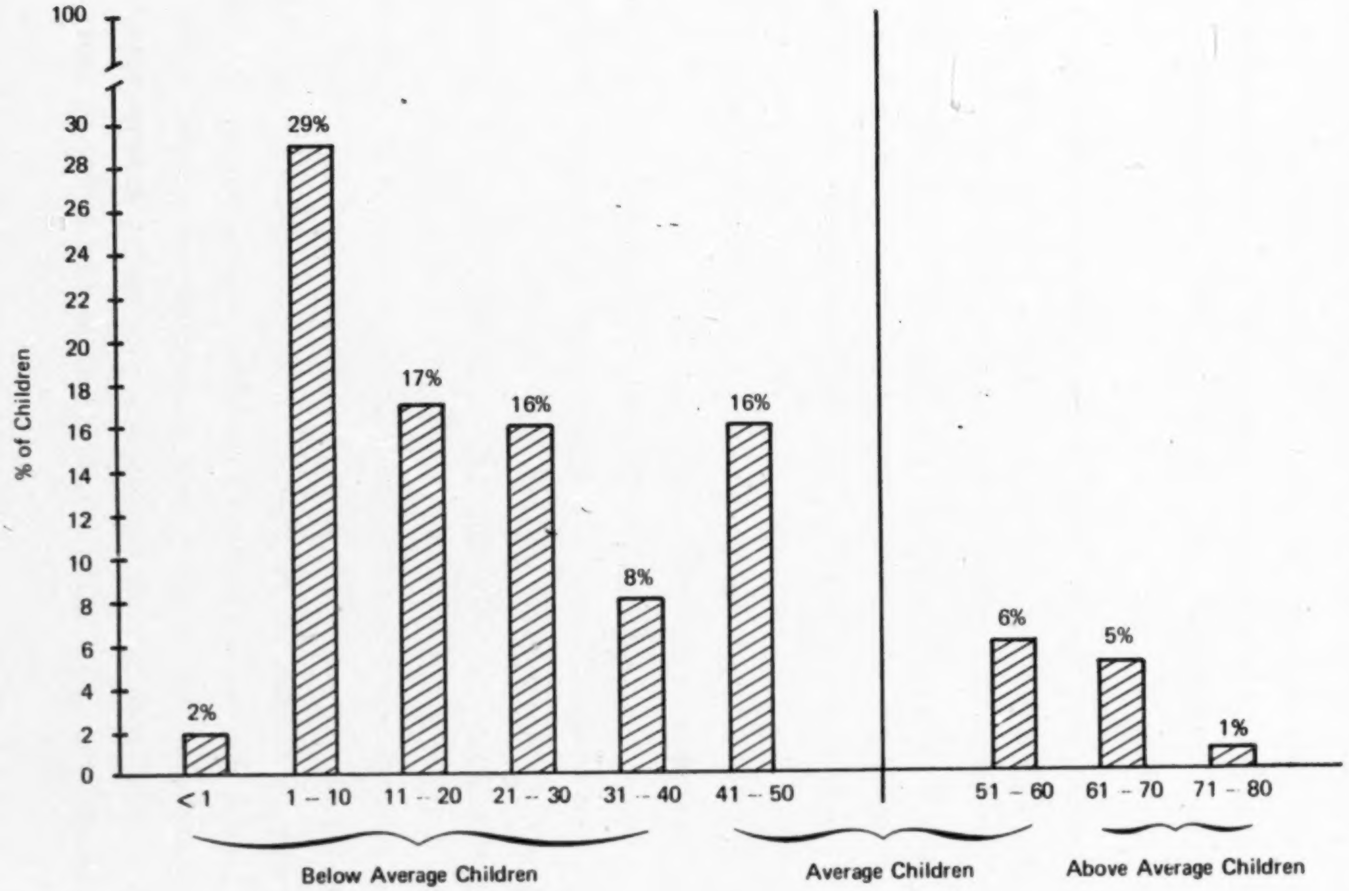


FIGURE 2.7. PERCENTILE RANKS ON THE WRAT READING SECTION—ALL CHILDREN

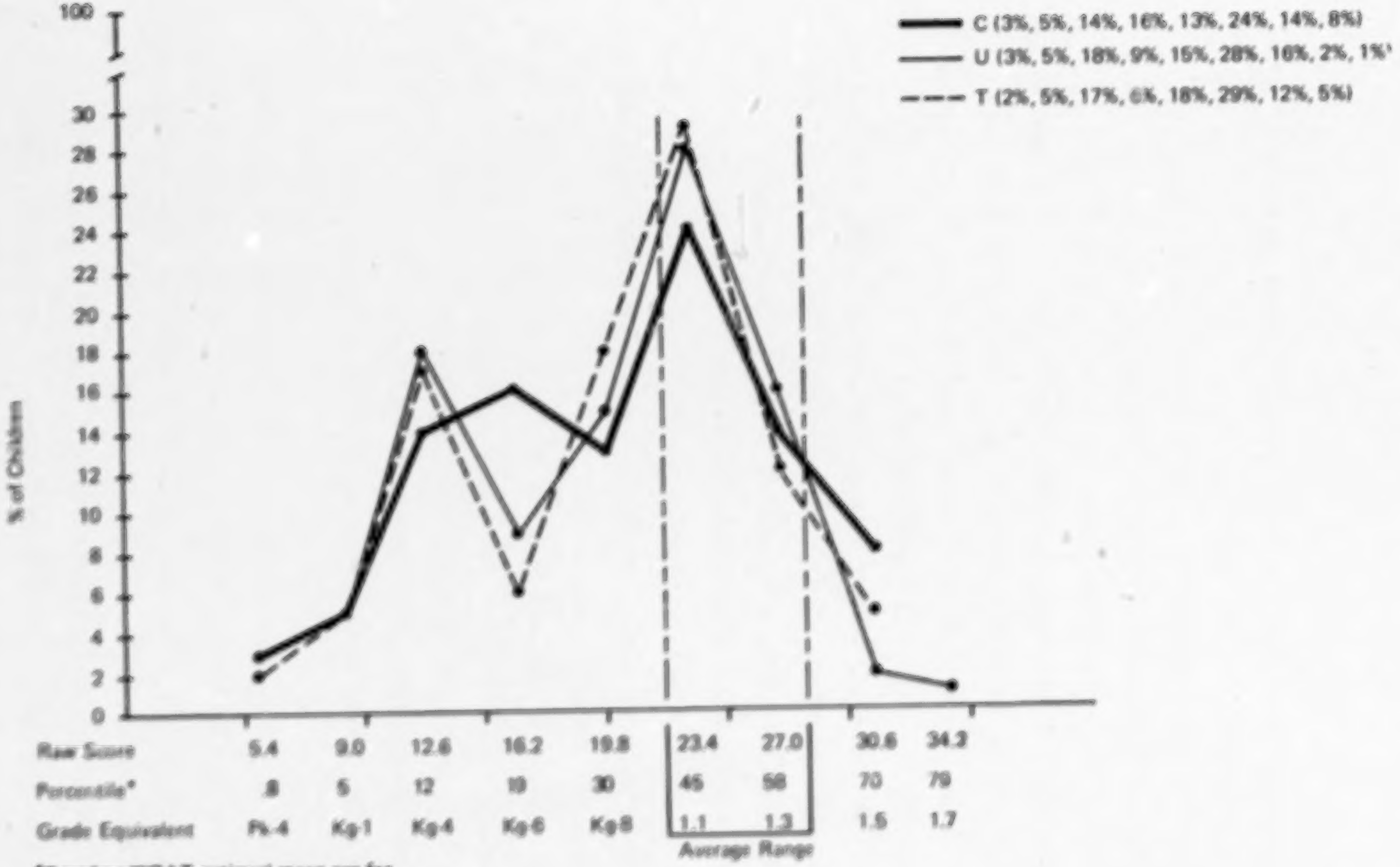
Now the Upswing children are being compared on the WRAT with average-age children rather than with children their own ages.

ORI recognizes that this approach may be controversial, but it is believed to be valid and it offers advantages to the analysis of the relative merits of the WRAT and the Metropolitan Primer for Project Upswing use, as discussed subsequently. In any case, the comparability of the C, U, and T children in achievement can be examined adequately without consideration of age. Figure 2.3, under "Parameters of the Population" (page 2.9), shows that the three groups have quite similar age distributions.

Figure 2.8 shows WRAT reading scores distributed in a bimodal pattern that is similar for the three groups of Upswing children. The curves for the U and T groups are almost identical, while the curve for the control group is distinguished by a minor loading of children with scores at about the 19th percentile rank (i.e., reading achievement equivalent to the kindergarten 6th-month level at 6 to 6½ years of age). The C group's bimodal tendency is not as pronounced as that of the other groups.

The bimodal pattern suggests that the Upswing selection process (primarily teacher judgment) has drawn two distinct subgroups of children with respect to factors measured by the WRAT. The bimodality also could be attributable to personal interaction with tester during WRAT administration and/or to subjective scoring effects caused by spread in tester training and experience.

Figure 2.8 also points up the impact of age. Close to 50% of all three groups (singly and combined) fall in the average range or above, and the dominant mode achievement level for all is right at the lower boundary of the average range. Thus, when the Upswing children's ages are disregarded, the population as a whole moves up on the achievement scale. When the percentile ranks and grade equivalents are adjusted for age, as in Figure 2.7, we see that almost two-thirds, as opposed to about half in Figure 2.8, of the children tested below average. Since many of the children "stack up" reasonably well as first



*Based on WRAT national mean age for children in first grade, second month (6–6½ years old).

FIGURE 2.8. WRAT READING RESULTS, BY STATUS GROUP

(Scores adjusted to remove effect of child age.
Missing data: 3% C, 3% U, 5% T.)

graders, but not as older-than- average first graders, one wonders if teachers were considering chronological age or the appearance of physical or social maturity when they made referrals.

The Metropolitan Primer scoring does not consider age differences. The children are compared to a sample of first graders whose age range, mean age, etc., are unknown. There are two standardization samples, one tested at the end of kindergarten and the other in the fifth month of first grade. ORI based its interpretation of the Primer scores on the latter norms, after trying both.[9]

The initial expectation might seem to be that, since the Primer disregards age, the Upswing children should rank about as well on the Primer as on the WRAT without age adjustment. However, in Figure 2.9, about 15% to 20% of all three groups fall in the average range or above. The children definitely demonstrated lower-level achievement on the Primer.

Table 2.1, a cross tabulation of WRAT and Primer raw scores, shows a fairly low correlation: .46 instead of the normally-expected .80 to .90. The correlation was computed on the basis of raw scores.

In interpreting this outcome, one must consider that the Primer was standardized on a population tested in the fifth month of first grade. Although testing extended into January of 1972, as noted in the beginning of this section,

---

[9] The San Francisco data were excluded from the analysis. It at first appeared that the Upswing children were not essentially different in reading achievement from a random sample of the average classroom. Since the finding was at odds with the WRAT results, ORI investigated. It appears that in San Francisco, the Primer was given on a one-to-one basis, which might partially account for the generally higher scores, since this is a group test intended to be taken without tester intervention. More importantly, an edit of the San Francisco data showed that many of the raw scores sent to ORI were outside of the range of permissible entries. It appears that a mix of

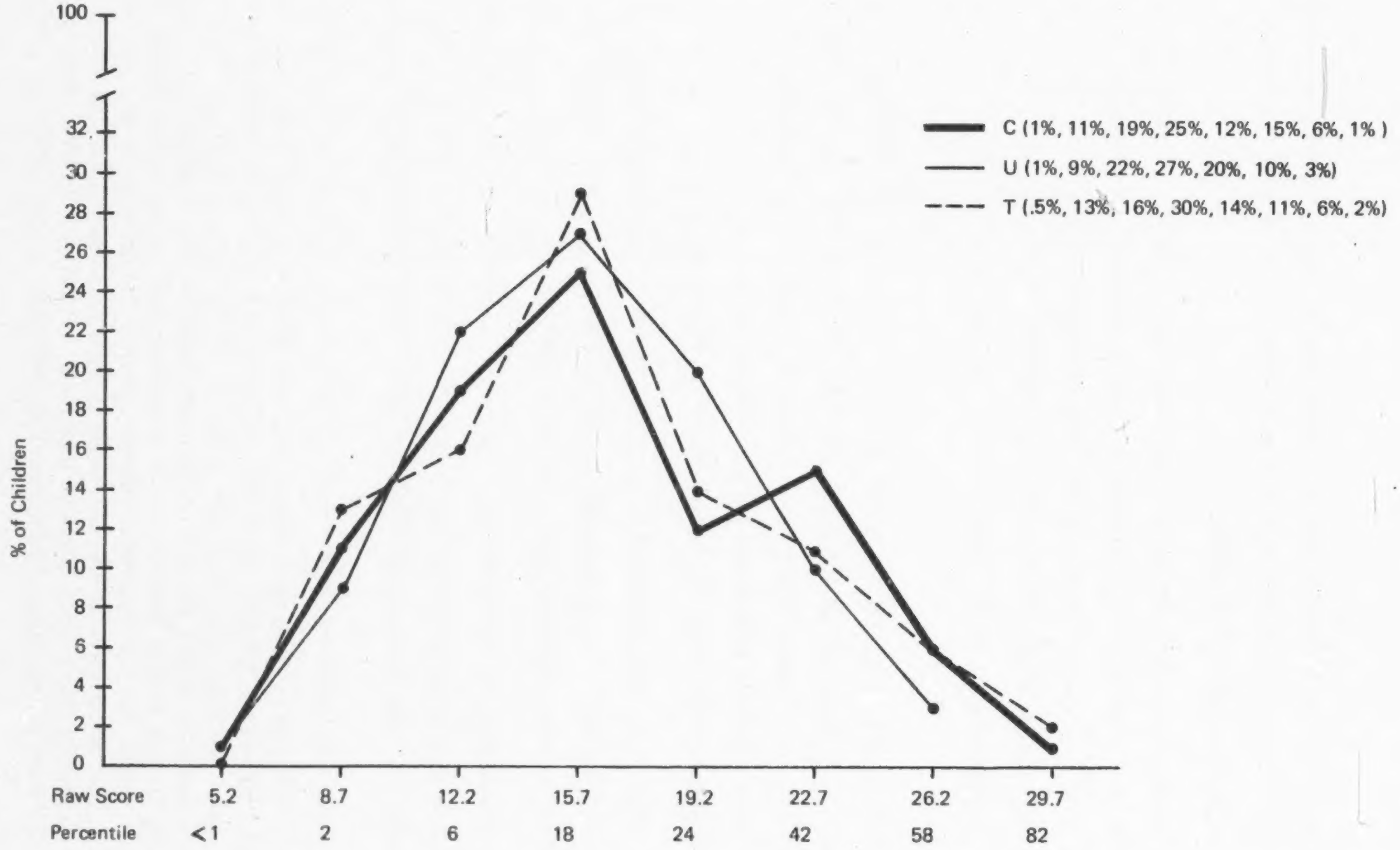


FIGURE 2.9. METROPOLITAN PRIMER RESULTS, BY STATUS GROUP

(Missing data: 10% C, 7% U, 8% T. Percentages do not add to 100% because of rounding error.)

TABLE 2.1

CROSS TABULATION OF SCORES ON THE WRAT READING AND METROPOLITAN PRIMER TESTS

(Numbers in cells represent numbers of children receiving both row and column score.)

WRAT Reading Raw Score*	Metropolitan Primer Raw Score*									
	No Score Reported	7	12	16	21	25	30	35	39	44
34	0	0	0	0	0	0	0	0	1	0
31	1	0	0	0	2	0	1	1	0	1
27	1	0	0	1	5	7	12	8	6	1
23	3	0	0	11	12	26	19	13	4	0
20	3	0	3	8	14	19	11	6	2	0
16	2	0	1	4	17	12	3	4	0	0
13	2	0	3	9	20	5	4	1	0	1
9	10	3	6	11	12	10	1	1	0	0
5	6	2	3	5	7	3	1	0	0	0
No score reported	0	0	1	1	3	2	0	0	0	0

*The ranges of both WRAT and Primer scores were divided into 10 equal intervals. The scores posted are the rounded central values of the intervals.

Correlation: r = .46.

most of the children were tested in November and December. Those tested in November, at least, could reasonably be expected to have done less well than if they had been tested 2 months later. In addition, it will be remembered that in removing the age effect from WRAT scores, the children were assigned the age of the average child in the second month of first grade. This would inflate the scores of Upswing children who were tested late.

Thus part of the difference between the WRAT results in Figure 2.8 and the Metropolitan Primer results in Figure 2.9 is probably a scoring artifact. Another condition, however, is believed to be more important—namely the format of the Primer and its difficulty for the Upswing children. The Primer is machine-scored. Children are required to indicate their answer choices by filling in small spaces on an answer sheet. This is a difficult task for many first graders. Moreover, as will be seen in the analysis of the Beery-Buktenica test results (page 2.30, ff), the large majority of Upswing children manifest visual-motor integration problems.

In contrast to the WRAT results, the Primer yielded, essentially, a single mode at the 18th percentile for the status groups (Figure 2.9).[10] All three WRAT distributions are bimodal (Figure 2.8). Thus both tests indicate

---

raw and standard scores may have been sent. It is not possible for ORI to sift these data to provide meaningful results. The Primary I test given to the San Francisco children at the end of the year as the Upswing post-tutoring test was not the correct form and cannot be compared with the Primer results. In addition, the post-testing was done on a group basis as opposed to the one-to-one basis for the Primer. For these reasons ORI cannot make any valid interpretations of the Metropolitan test data from San Francisco. Thus, San Francisco will no longer be considered in the Metropolitan portion of this evaluation.

[10] The slight peak in the C curve at the 42d percentile is not considered a significant deviation in view of the similar percentages of children who tested as average or above-average achievers in the three groups. It is interesting that the C group also showed a deviation on the WRAT. Its secondary peak in that case also tended to raise the C's achievement level (very slightly) in comparison to the T and U groups, although in that case the secondary peak was at a much lower level.

that the C, U, and T children were comparable,[11] as well as that they were underachieving, in terms of what was measured. However, it appears that the two tests may measure different characteristics, at least in part. If so, then it also appears that the types of things measured by the Primer are more closely related to subjective criteria used in common by teachers to select the children for Upswing, while the WRAT is attuned to criteria not used in a common way by all teachers. In this connection, the Primer is highly curriculum-oriented. The test items are much like those found in traditional reading workbooks, probably because the test was designed to be group-administered and the items must be familiar enough in format that the child will not be confused. The WRAT, administered one-to-one, is less "classroomish" in content and requires social interaction with the tester. The point here is that teachers would be more likely to make homogeneous application of selection factors relevant to the straightforward skills the Primer measures.

Another possibility is that the more dynamic WRAT is a more sensitive instrument, beyond the sensitivity to age built into its scoring procedures. Since it is administered one-to-one, it probably recognizes a broader spectrum of achievement in children than would be detected by a static group measure. Further, as mentioned earlier, it may be that the WRAT bimodality is an effect of the range of skill of the testers, in test administration or scoring.

Comparability of Children by City. When the WRAT and Primer results are analyzed by city, they reflect much the same differences as when analyzed by status group of children. Again, the effect of age on the WRAT distribution has been removed, so that it can be compared directly with the Primer distribution. It has been established that this procedure inflates the children's WRAT achievement levels. Thus, here, only the comparability of the city populations, and their relative levels will be considered.

---

[11] The control children do appear to have a slight lead over the other children on both tests. If there is a genuine difference, it could have resulted from children who were tested first being placed into the experimental groups so tutoring could get under way. If that were the case the control children, tested later, would appear to have a higher initial achievement level.

Figure 2.10 indicates that each location has a different child population with respect to what the WRAT measures. Oxford, San Francisco, and St. Louis all have bimodal distributions, but there the similarity ends. Oxford is almost a mirror reflection of St. Louis, with a high peak in the low range to reflect St. Louis's peak in the high range. San Francisco, on the other hand, displays a relatively even distribution of children across the WRAT range, with only minor peaks. Denver produced a curve quite unlike any of the others. It is a smooth curve, skewed to the right, peaking at the 25th percentile and rolling slowly off to around the 53d percentile

It is clear from the WRAT scores that Oxford supplies the bulk of lowest scoring children to this project, while Denver, especially, and St. Louis provide the higher achievers.[12/] San Francisco provides children at all levels. This finding is reasonable because of the varied character of the cities. However, the Primer scores show a different picture. Figure 2.11 shows Oxford, St. Louis, and Denver as having virtually the same distributions. San Francisco Primer data are excluded from the analysis, as explained earlier.

A number of possible explanations for the differences were discussed in the analysis of achievement by status group. These would hold for the analysis by city. Such tentative conclusions as can be drawn based solely on the "pre-tutoring" test data are presented at the end of the "Test Results."

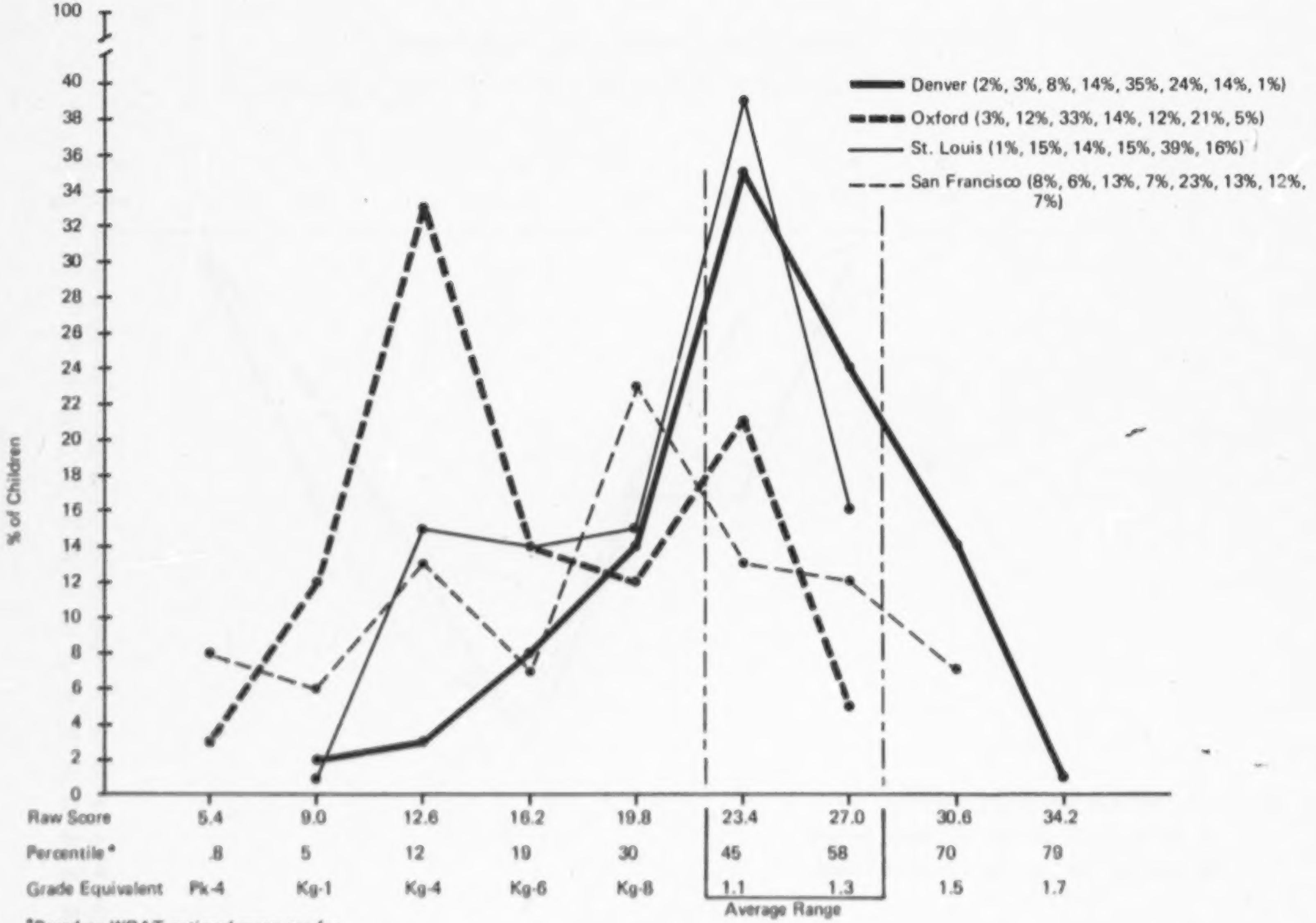
Visual-Motor Integration

The following material pertains only to children in Oxford, St. Louis, and San Francisco. The VMI was not given in Denver. The numbers of the Denver C, T, and U groups were removed from the totals before the percentage distributions of scores were calculated.

The VMI results reinforce the similarity of the three groups of Upswing children. Figure 2.12 shows a single dominant mode performance level at an

---

[12/] Remember that Upswing high achievers can still be significantly below the national average; and that the achievement levels for the sizable group of Upswing children who are older than $6\frac{1}{2}$ are inflated in Figure 5.10.



*Based on WRAT national mean age for children in first grade, second month (6–6½ years old).

FIGURE 2.10. WRAT READING RESULTS, BY CITY

(Missing data: 10% San Francisco. Percentages do not add to 100% in all cases because of rounding error.)

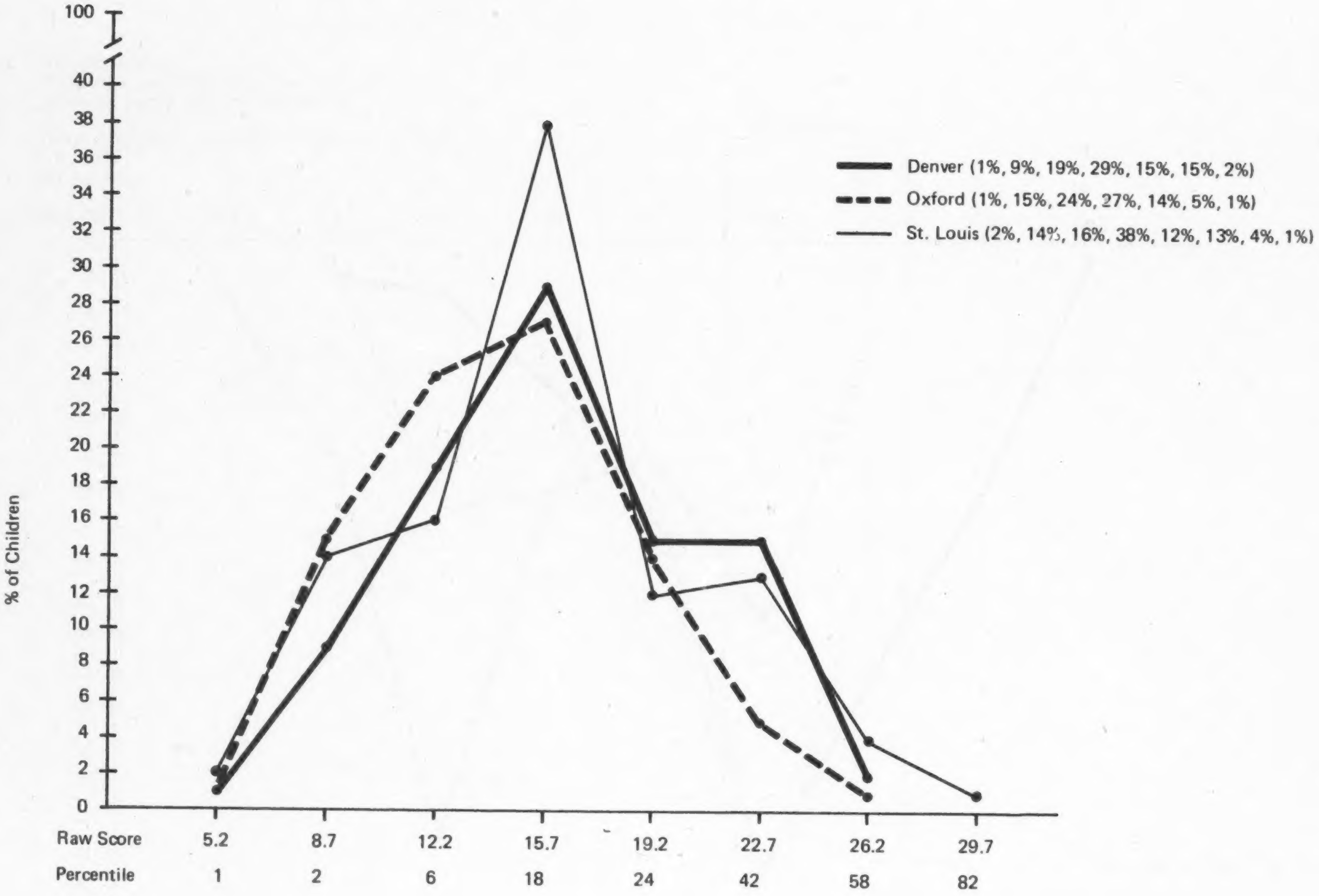


FIGURE 2.11. METROPOLITAN PRIMER RESULTS, BY CITY
(Missing data: 10% Denver, 13% Oxford.)

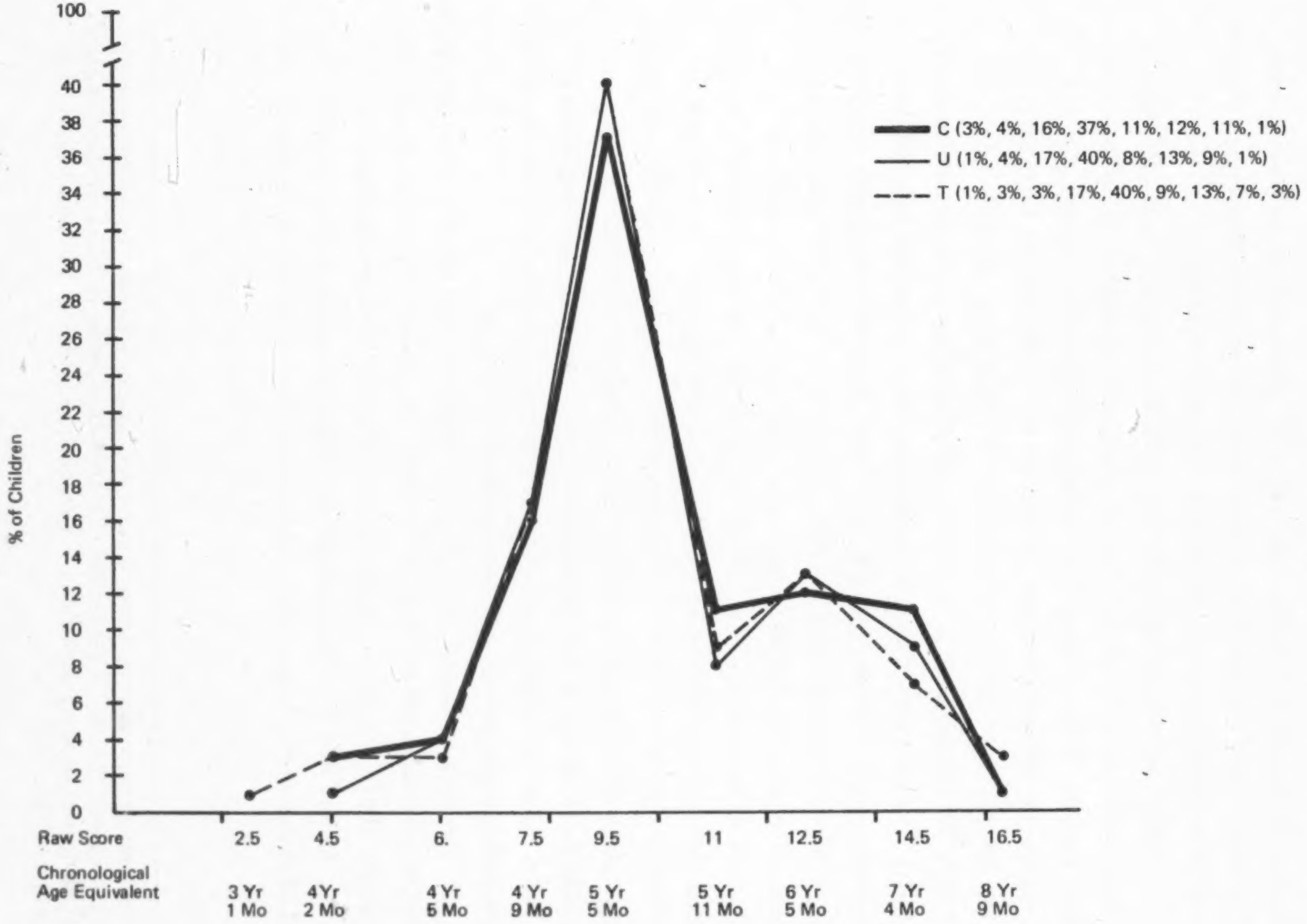


FIGURE 2.12. VMI RESULTS, BY STATUS GROUP

(Missing data: 5% C, 7% U, 4% T.)

at an age equivalent of 5 years, 5 months.[13] About 40% of all three groups tested at this level. About 23% of each group tested below that level and about 30% of each tested at an age equivalent of 6 years or above.

These results indicate that the children in general were functionally immature at the time of testing. About one-third in Figure 2.12 are below the 5 year, 5 month level. Figure 2.13 shows the difference between VMI age equivalent and chronological age in years and months, for the total child population for whom test data were received. (In this case, not only Denver is excluded, but the children in the other cities for whom no scores are available as well.) The comparison clearly establishes that 69% of the Upswing children (excluding the Denver population) had visual-motor integration significantly below normal for their ages at the time of testing. Thirteen percent tested significantly above the average expected performance level. There was no significant difference for about 18% of the children. It would appear that the reading difficulties of the children with below-average VMI scores would be attributable, at least in part, to psychomotor coordination problems. However, as discussed in the review of general findings (pages 2-37,ff), the data indicate that there may be a low correlation between the WRAT and VMI scores. If that is the case, it could be an artifact of testing, or it could be the result of special characteristics of the Upswing child population.

The data by city (Figure 2.14) indicate that the children in all locations tended to perform below average on the VMI. There are differences among the cities, but these should be viewed in the perspective of the dominant trend.

Oxford and St. Louis have child populations that are very similar in level of visual-motor integration. All three measures of central tendency, for

---

[13] The VMI documentation refers to the age equivalents as "chronological age equivalents (CAEs)." However it is probably better to think of them in terms of performance age, similar to the mental age (MA) on the performance part of the WISC.

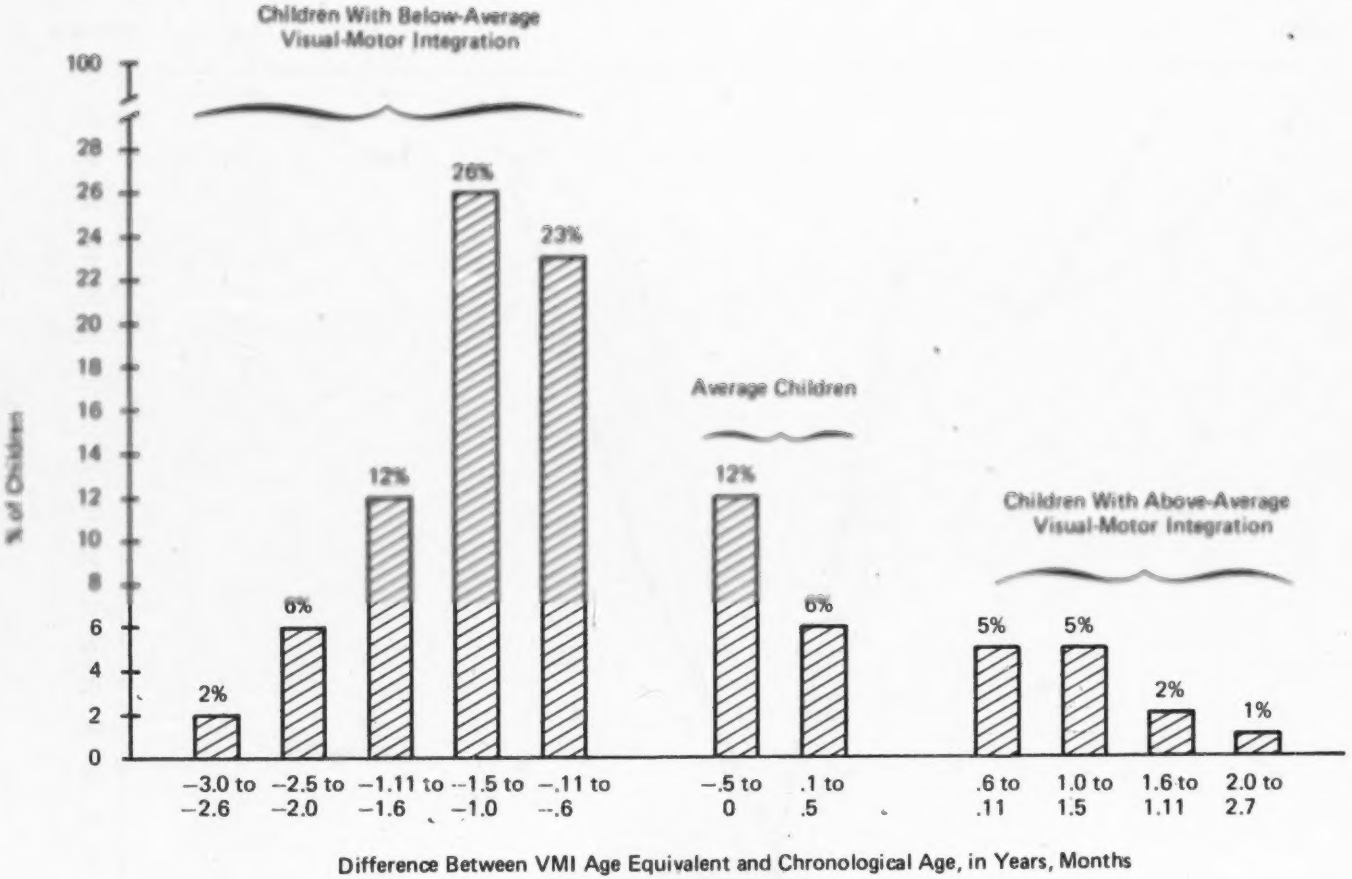


FIGURE 2.13. DEVIATION OF VMI AGE EQUIVALENTS FROM CHRONOLOGICAL AGES, ALL CHILDREN

(N = 326. Denver is not represented; "no-data" cases from the other cities were removed for percentage calculations.)

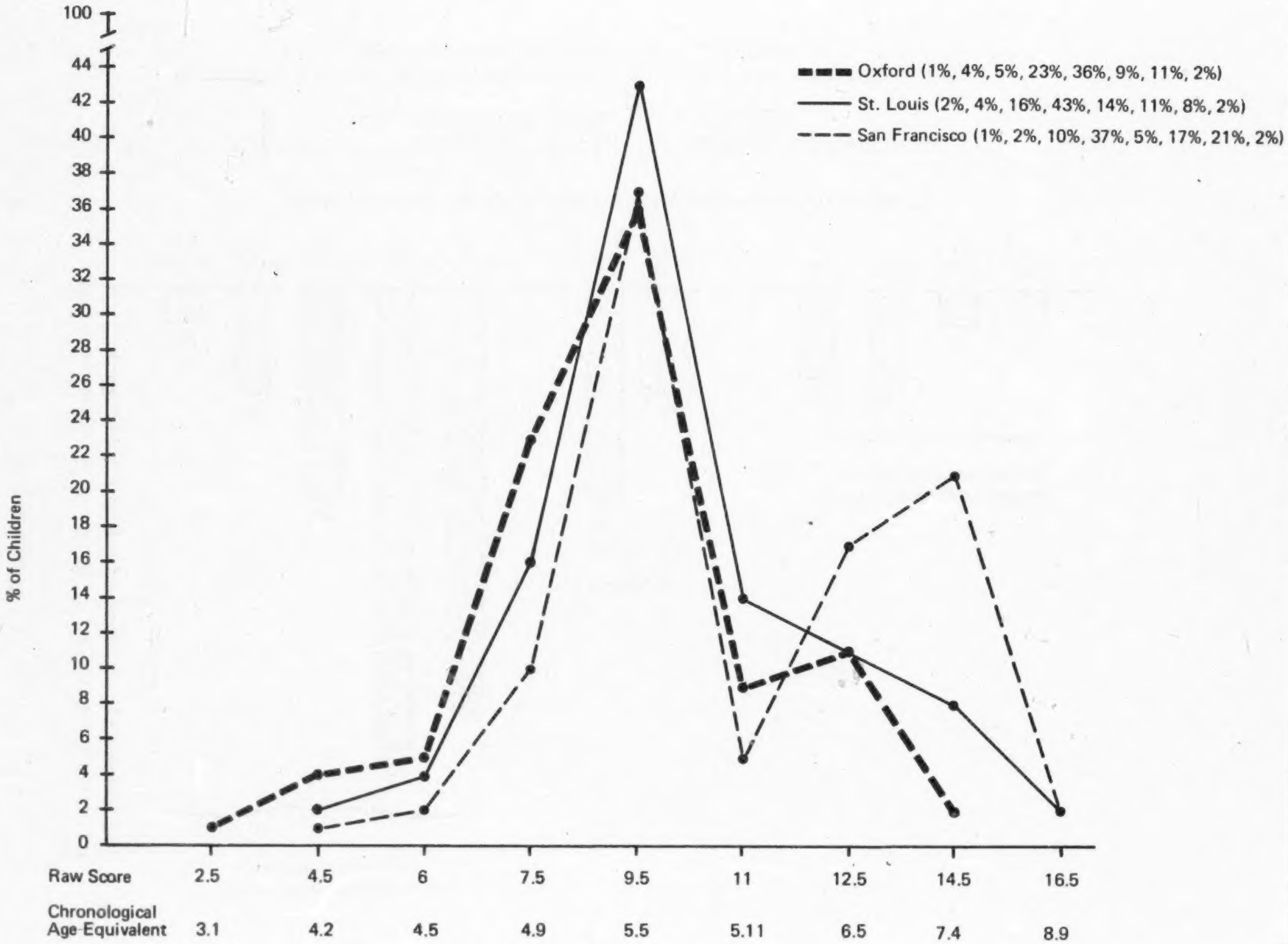


FIGURE 2.14. VMI RESULTS, BY CITY

(N = 345. Denver not represented; "no-data" cases from the cities remain in the total.)

both cities, fall at about the age equivalent of 5 years, 5 months. Ninety-nine percent of the Oxford children and 100% of the St. Louis children were at least 6 years old at the time of testing, and 69% of both populations were over 6½ (Figure 2.4). Thus it appears that visual-motor immaturity may have been factor in the learning difficulties they evidenced.

In Figure 2.14, San Francisco displays a population slightly different from the others. The distribution is bimodal, with its dominant tendency like that of Oxford and St. Louis (children testing at a VMI age equivalent of about 5 years, 5 months.) The secondary mode, however (representing 21% of the children), occurs above the mean age of Upswing children (6 years, 8 months). Furthermore, the San Francisco children tend to be somewhat younger than the children from the other cities (although all were over 6 years old at the time of testing), with 49% older than 6½, as opposed to 69% in the other two cities from which VMI data were received. This would indicate that a large portion of the referrals made by San Francisco teachers were not based on psychomotor immaturity.

Discussion of General Test Findings

The overall test analysis has had as its major purpose to present ORI's estimate of the degree to which Upswing approaches its stated population parameters. In the course of the analysis we have also examined the strengths and weaknesses of the tests used.

The three groups of Upswing children (C,U and T) are similar enough for comparative analysis on the characteristics tested. The test results indicate that, in general, the child population is reasonably well within the constraints of the project design. The Slossen results place nearly 100% of the children within the range of average IQ. The age-adjusted WRAT reading scores show about 70% of the children underachieving for their ages, while the Metropolitan Primer scores indicate that about 70% were underachieving in relation to a random normal population of children tested in the fifth month of first grade. The two sets of achievement data are puzzling and conflicting in a number of ways, but there seems to be little room for argument that the Upswing children, for the most part, demonstrated lower than normal achievement in the test situation. As for the VMI measure, it found close to 70% of the children immature in the areas of psychomotor coordination that it covers. (This was not a population criterion, but it was an expected characteristic.) A significant percentage of children scored above average on the VMI, as on the WRAT and Metropolitan Primer (approximately 30% of the children for whom data are available, in all cases).

It should be borne in mind that academic testing is not an exacting process. All too often, test scores are used to justify faulty conclusions; at best, they give the researcher a rough operational measure of the abstract.

We have stated that the WRAT and Metropolitan Primer measure components of achievement. It is also true that some components of achievement have not been (perhaps cannot be) measured. It is, however, quite reasonable to assume that children who score above average on the WRAT might truly be underachievers. The WRAT measures only a small segment of the multidimensional construct known as achievement. The child who is unable to participate in class activities because of emotional immaturity may perform well on a test, while achieving very little in his teacher's eyes. The teacher's perception of achievement is perhaps as valid as the test's, but neither presents the total picture. This problem is of course compounded when a test that has no age norms is used, like the Metropolitan Primer. Such a test suggests that a 12-year-old first grader has no learning problem as long as his raw score is as high or higher than half the children used in standardizing the test. On the WRAT, this same child would stand out below the first percentile as having a severe learning problem.

It would seem reasonable to assume that the reading difficulties of Upswing children were commonly associated with problems of psychomotor immaturity. However, aberrations in the data suggest that the correlation between the VMI and WRAT scores and the VMI and Primer scores may be low. Preliminary raw score correlations between the WRAT and VMI, and Primer and

VMI, were both very close to zero. Several intervening variables, not operative in an average child population, could have disrupted the normal relationship between visual-motor integration and reading achievement. Such factors as language barriers and emotional problems come to mind from the interviews conducted with a sample of children in each city's project.

The analysis of Upswing's first round of testing suggests a need for documented, more consistent tester training in all cities. This is necessary so that all who administer tests have a known minimum level of qualification for their work. The data suggest that varying expertise may have distorted some of the results.

ORI would also suggest at this time that a group achievement measure that offers age-adjusted percentile rankings to be sought for use in conjunction with the WRAT or alone. It should not be a machine-scored instrument. More consistent results probably would be obtained if the one-to-one and group tests used had comparable interpretation procedures.

Elimination of the marking requirements for machine scoring would reduce the probability of erroneous test outcomes. An age-adjusted group test used as the sole achievement measure might satisfy Upswing's purposes. Certainly it would reduce the costs, and the problems of scheduling and tester training associated with one-to-one administration.

BACKGROUND INFORMATION ON DENVER CHILDREN

Purpose

As stated in the introduction to this section, it was planned to describe the child population in terms of background characteristics as well as learning characteristics. The background data were to be provided by parents on the "Parent Registration Form." (See Appendix for copy of this form.) However, so few parents in Oxford, St. Louis, and San Francisco returned registration forms that no background information about the children in those cities can be given. Only Denver children are described here.

The data are presented for general information purposes only. The population described is not necessarily representative even of the total Denver child population, because of nonresponse (as discussed under "Parameters of the Population"). The data will not be used in the final evaluation of the impacts of Upswing in its first year of operation. This section is included in the report at the request of the U.S. Office of Education.

Data Source

The data were collected via a parent registration form designed by ORI for the projects in late August 1971 and mailed to them in September 1971. In Denver, the forms were taken to the elementary schools involved in Upswing. The children (all except control group children) were to deliver the forms to their parents and bring the completed forms back to school, where they would be picked up by Upswing staff for forwarding to ORI.

Parameters of Population Described

With the method of distribution used, there are many opportunities for forms to be lost and no way of documenting who received a form. Further, the exact size of the population at the time the registration forms were distributed is unknown, so ORI does not know even how many parents should have received one. According to the Denver "Mid-Project Report Form" (completed in January 1972), 152 children were referred by teachers for participation in Upswing and none was screened out as a result of the testing done for the project.[14] Presuming that approximately 50 of these children were assigned to the control group, approximately 102 should have been registered for the project. A memorandum from the project office shows that 110 children were assigned tutors as of December 15, 1971.

Under these circumstances, ORI must use what seems to be the most appropriate available indicator of the original size of the parent population (in terms of number of children represented) to compute the response rate for the parent registration form. Again, it is stressed that there is no record of who actually received a form. The number selected is 110, the number of children who were assigned volunteers as of December 15, 1971, according to the Denver project office.[15] ORI has registration forms from the parents of 67 children. Using 110 as the number of possible respondents, the response rate is 61%. The children described in the following pages are not necessarily representative of the total population of Upswing children in Denver. The background characteristics of more than one-third of the population are unknown.

Children's Family Background Characteristics

Age. All of the Denver children for whom data are available were at least 6 years old when the 1971-72 school year began. Forty percent were from 6 years 0 months through 6 years, 5 months in age; 49% were from 6 years, 6 months through 6 years, 11 months in age. Nine percent of the children reported on were 7 years old, with 8% of these under 7½ and 2% age 7½ through 7 years, 8 months. (Nonresponse to question—1%.)

Sex. Almost three-fourths of the 67 children whose parents registered them for Upswing were boys (72%, versus 28% girls). This is 44% of the probable total population of experimental group children (the 110 who were assigned volunteers as of December 15, 1971). Since it is highly unlikely that the parents of girls tend to be nonrespondents more than the parents of boys, it seems safe to assume that the majority of the Denver child population is male.

---

[14] The tests were not used for screening purposes. According to the Mid-Project Report all children referred for participation in Upswing by their teachers were being tutored (except those assigned to the control group).

[15] There is a slight discrepancy here, in that 110 children were reported to be assigned to volunteers but 111 volunteers were reported to be "on the job." This difference is considered unimportant.

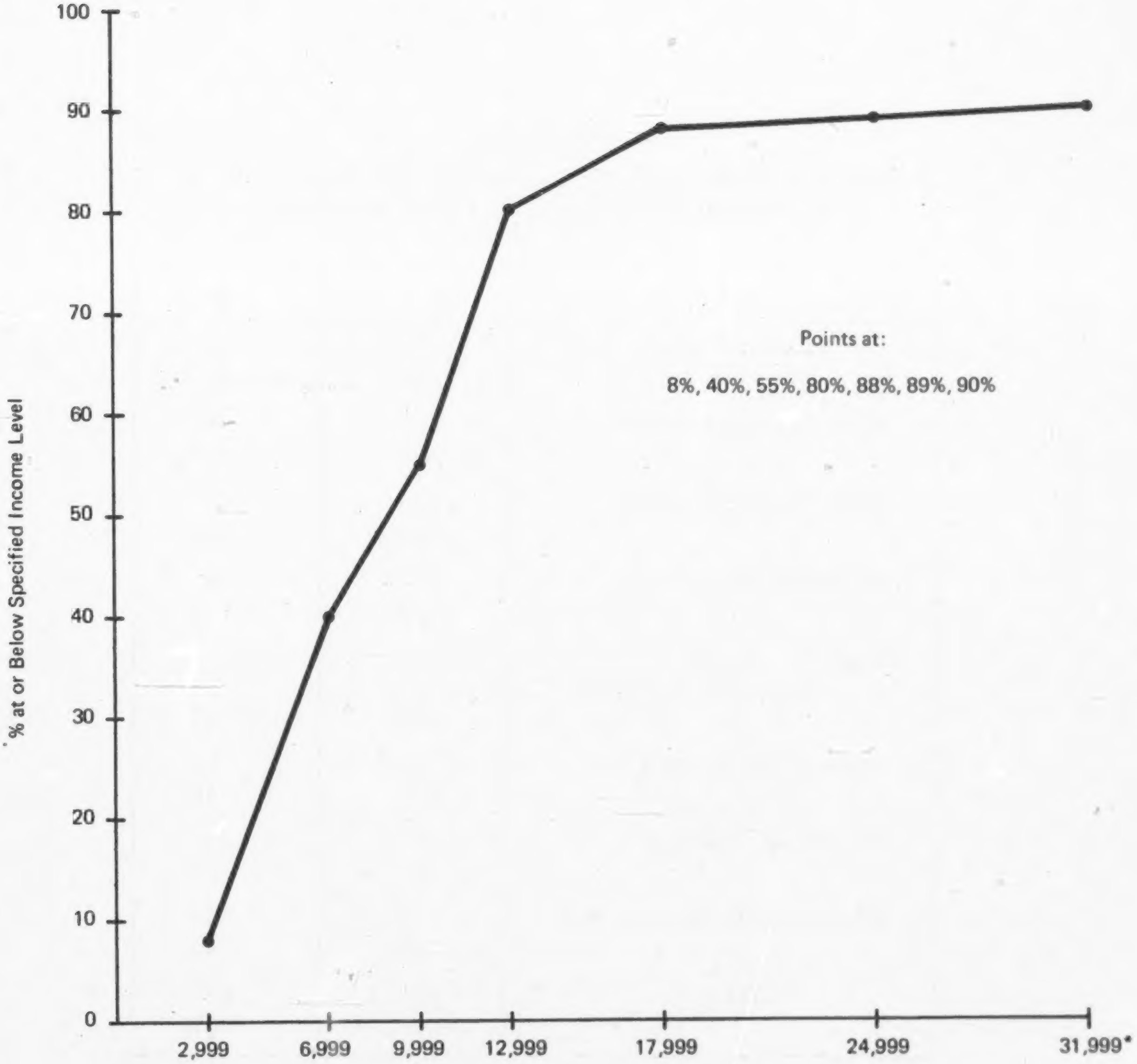
Marital Status of Parents. It appears that the majority of Denver children for whom ORI has data are from two-parent homes. The answers choices for the marital status question were: single, married, separated, divorced, and widowed. Seventy percent of the responding parents checked "married." This implies that except for unusual circumstances, such as long-term illness of a parent, or father away on a military assignment, the parents were living together. None of the responding parents said they were separated or widowed; 3% said they were single, 25% said they were divorced, and 2% did not answer the question.

The belief that most of these Denver children are from two-parent homes is supported by the responses to a question on number of adults living in the home. This question apparently was confusing and the responses are not considered completely reliable. However, through analysis of individual questionnaires, ORI found that 45 children (67%) are from homes in which two adults are living (nine, or 13%, are from one-adult homes; three, or 5% are from homes with more than one adult; there was a nonresponse rate on this question of 15%, which includes responses that could not be interpreted).

Family Income. Figure 2.15 shows that the children tend to come from families of modest means. Forty percent of the responding parents said they have family income of less than $7,000 per year, while 55% have income of less than $10,000 per year and 80% have income of less than $13,000 per year. The national average income for a family of four was $12,414 in 1970.[16] Thirty-six (54%) of the families represented by the parent registration data include three or more children, and 21 families, or 31%, include two children. The responses on number of adults living in the home (item 12 on the form) were somewhat confused, but by reviewing each form,

---

[16] U.S. Department of Commerce, Bureau of the Census, Family Income Division (1971 survey data obtained by telephone).



*Arbitrary upper limit; the actual response category was "$25,000 and above."

FIGURE 2.15. FAMILY INCOME OF DENVER CHILDREN WHOSE PARENTS RETURNED REGISTRATION FORMS

(Nonresponse to question: 10%.)

TABLE 2.2

HIGHEST LEVEL OF EDUCATION OF DENVER PARENTS WHO REGISTERED THEIR CHILDREN FOR UPSWING

Highest Level of Education	Mother	Father
8th grade or less	3 4%	10 15%
Attended high school	20 30%	14 21%
High school graduate	30 45%	27 40%
Attended college	10 15%	7 11%
College graduate (bachelor's degree)	3 4%	2 3%
Some graduate school	0 0%	3 4%
Advanced degree	0 0%	1 2%
No response to question	1 2%	3 4%
Total	67 100%	67 100%

ORI determined that 17 of the two-child families also included at least two adults. This establishes that a minimum of 53 families (36 with three or more children, plus 17 with two children and at least two adults) have four or more members. That is, 79% of the children on whom ORI has data are from families of four or more. Thus it appears, from these data and the data on the family income of Denver volunteers (Figure 3.6), that the volunteers are considerably more affluent than the families of the children they tutor.

Parents' Education. The Denver parents for whom ORI has data generally have had no formal education beyond high school. From Table 2.2, 79% of the mothers and 76% fathers completed high school or less, with about one-third of both mothers and fathers below the high school graduate level. Fifteen percent of the mothers and 11% of the fathers attended college but did not graduate, while 4% and 3%, respectively, earned a bachelor's degree. No mothers have attended graduate school; 6% of the fathers have done some graduate work or earned an advanced degree.

In comparison, 81% of the Denver volunteers have gone beyond high school. Table 3.7, on volunteers' highest level of education, shows that 38% attended college (but did not graduate), 22% have earned a bachelor's degree, and 21% have done some graduate work or hold an advanced degree.

Languages Spoken in Home. For 81% of the children who were registered for Upswing, English is the only language spoken at home. Nineteen percent (13 children) come from bilingual homes. In most cases (9 of the 13) the language is Spanish. French, German, and Polish are each spoken in one home. One parent did not specify the language.

Children's School Experience Prior to Upswing

Denver has both public school kindergarten and a Head Start operation (we are considering the latter as "nursery school," which was the response category on the parent registration form). Thus it is not surprising that 95% of the children for whom ORI has data had some kind of school experience prior to first grade. Thirty percent attended both kindergarten and nursery school, while 65% attended kindergarten only and 1% (one child) attended nursery school only. All of the children from bilingual homes (13, or 19% of the population) had kindergarten, nursery school, or both, so they probably had some exposure to an English-language environment even if English were seldom or never used at home. (This of course could have been a confusing, frustrating, or otherwise damaging experience for them as well as a helpful experience.)

Children's Attitudinal Characteristics

Attitude Toward School. The parents were asked about their children's attitudes toward school. ORI hoped to establish a baseline from which we could measure changes in attitude, if any, over the school year. The data available indicate that the overwhelming majority of responding parents believed that their children had positive attitudes toward school at the start of the year. The responses were as follows:

Child Attitude	Number and Percentage of Children
Enthusiastic or favorable	55 82%
Indifferent	4 6%
Negative*	7 10%
No response to question	1 2%
Total	67 100%

*The actual response category was "slightly negative." A "completely negative" choice was included, but no-one answered in that way.

Relationships With Other Children. Three questions were asked to get information about the child's social development:

- Does he/she like to participate in group activities at school?

- Does he/she get along well with other children in his/her age group?
- Does he/she have regular playmates in the neighborhood in his/her own age group?

The overwhelming majority of parents indicated that their children had no difficulty in relating to other children. The responses to the first two questions are shown in Table 2.3. The responses to the question about playmates in the home neighborhood were as follows:

Does Child Have Regular Playmates?	Number and Percent of Children
No	6 9%
Only one	12 18%
Two	14 21%
Small group	27 40%
Many	7 10%
There are no other children in neighborhood	1 2%
Total	67 100%

It is noted that the parents indicated that only 4% of the children did not get along well with other children, yet 9% were said to have no playmates in the home neighborhood. Since the answers included a no-playmates-available option one would assume that is not the problem. There could be several reasons for a child having no playmates even though they are available to him. In any case, both percentages (does not get along well and no playmates) are so low that the difference is felt to be unimportant. Another comment to be made about the playmates question is that it does not reveal how many playmates were available to the child. Thus there is no way to interpret the distribution of children by number of regular playmates. The most important point to be made, however, is that most of the Denver children for whom ORI has data were able to maintain friendships with other children outside of school.

TABLE 2.3

INDICATIONS OF DENVER UPSWING CHILDREN'S SOCIAL RELATIONSHIPS

Question	Response				Total
	Yes	No	Don't Know	No Response	
Does child like to participate in group activities?	53 79%	5 8%	6 9%	3 4%	67 100%
Does child get along well with other children?*	64 96%	3 4%	0 0%	0 0%	67 100%

*The actual response choices were: "Almost always" and "Usually" (interpreted as "Yes"), "Not often" and "Hardly ever" (interpreted as "No"), and "Don't know."

III. PROFILE OF VOLUNTEERS

PURPOSE

This section describes the characteristics of Project Upswing's volunteer tutors. Trained and untrained volunteers are compared. Similarities and differences between the individual city populations (trained and untrained combined) also are considered.[1]

The development of the volunteer profile is one step in the evaluation of first-year project outcomes. It supports the evaluation in three major ways. First, of course, it indicates what kinds of people served as Upswing volunteers. Second, it shows how well the trained and untrained populations were matched; the effects of training are of primary concern in the evaluation, and they can be isolated for analysis only if the trained and untrained volunteers are similar in other characteristics. Third, if differences in project effectiveness (as measured by changes in the children's reading achievement, self image, and psychomotor behavior) are detected, differences in the cities' volunteer populations must be examined (among other variables). It also was planned that the evaluation would seek to determine whether the selected background characteristics appeared to have any impact on volunteer effectiveness. (For example, did the children tutored by, say, college students, or by volunteers with previous related experience, make greater gains than other children.) However, attrition reduced the volunteer population to such a small total number that it could not be partitioned in that way and still provide meaningful data.

---

[1] The data were not split on volunteer training status for the by-city presentation. From the attrition data received up to now, and the nonresponse rates for the first impressions questionnaire, it is unlikely that ORI will be able to do a valid statistical analysis of the effects of training at the individual city level.

The profile also serves as an indicator of the kinds of people who might reasonably be expected to be drawn to a project like Upswing. The cities are diverse in nature and used various recruiting techniques; yet, as will be seen in the following data, their volunteers are similar in background characteristics. This suggests that certain types of people may be likely to serve as volunteers in education.

DATA SOURCE

All volunteers were asked to complete a university registration form designed by ORI. (A copy of the form is included in the appendix to this report.) Many did so during orientation or training meetings. The city project staffs conducted informal follow-up to obtain forms from nonrespondents among the original recruits and secured forms from those who joined the project later during the year. The volunteer profile is based on data from these forms.

PARAMETERS OF THE POPULATION DESCRIBED

According to the project design, each city was to have 50 trained and 50 untrained volunteers, for a four-city total of 200 volunteers in each group. Because of the necessity to meet the quota for the trained group before training began, the cities filled those slots first. This procedure apparently reduced the supply of volunteers available for the untrained group, so that overall it had 39 fewer volunteers than the trained.

All cities met the quota for trained volunteers, and Denver and St. Louis exceeded the quota, anticipating that there might be attrition and they could not replace trained volunteers. Oxford was the only city to achieve its quota of untrained volunteers; that city exceeded the quota by two people. Denver and St. Louis came close, with, respectively, 48 and 46 untrained volunteers. San Francisco was able to recruit only 38 volunteers for the untrained group. Table 3.1 gives the number of trained and untrained volunteers in each city.

The data presented here represent 100% of the 407 volunteers who originally registered for Upswing in the fall of 1971 according to the lists of volunteers provided by the city project offices. All but three of the "late recruits" also are included. (Three registration forms were received after the data were tabulated in March 1972.)[2]

TABLE 3.1

NUMBER OF TRAINED AND UNTRAINED VOLUNTEERS WHO REGISTERED FOR UPSWING, BY CITY

City	Trained	Untrained
Denver	68	48
Oxford	50	52
St. Louis	55	46
San Francisco	50	38
Total	223	184

---

[2] The profile was not adjusted for volunteer attrition since its object is to show the characteristics of the original population. Characteristics of attritees are described in Volume II, Section V.

SUMMARY OF VOLUNTEER CHARACTERISTICS

- The majority of Upswing volunteers are married women homemakers (not employed full-time outside the home).
- They are fairly evenly distributed over the age range from 17 to 80, but there is a tendency toward the younger side (slightly under two-thirds are 40 or younger).
- The data indicate that the volunteers tend to have above-average income.
- They are well educated. About two-thirds have bachelor's degrees, while approximately 15% more have attended graduate school or hold advanced degrees.
- About one-third had some formal training in child development before volunteering for Project Upswing, and about half had previous relevant experience as volunteer tutors, teacher aides, or teachers.

- The trained and untrained populations are, on the whole, quite similar in background characteristics, despite the fact that in three of the four cities they were allowed to choose training or no training. (The project design called for either random assignment or deliberate matching by the project directors.)

- The individual city populations also are, for the most part, similar.

- The most important differences, both between trained and untrained and between cities, are in age and, related to age, number of college students. There are more than twice as many people under 21 among the untrained volunteers. Almost all of these are attending college. Oxford has a much younger population of volunteers than the other cities, and 70% of the Oxford volunteers are students (compared with 28% students in San Francisco and Denver and 22% in St. Louis). St. Louis has a somewhat older population of volunteers than any of the other cities.

VOLUNTEER CHARACTERISTICS

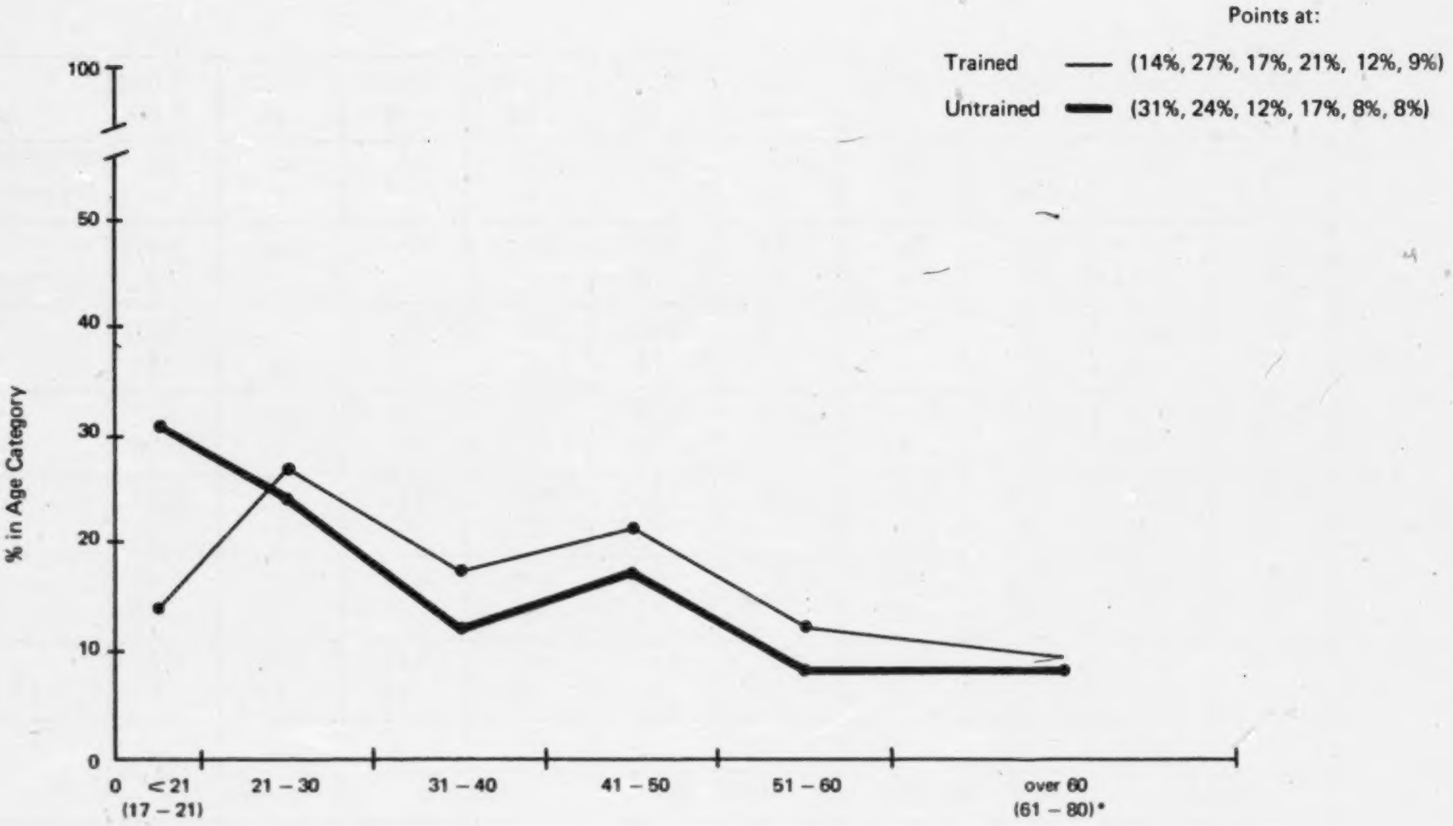
Age

Figure 3.1, based on the total population of Upswing volunteers (407 in the four cities combined), shows two distinct age tendencies. First, the youngest volunteers are concentrated in the untrained group: 31% of the untrained volunteers are under 21, while about 14% of the trained are under 21.

The second point is that except for the marked difference in the under-21 range, the two curves are almost identical. If the under-21 volunteers are removed from the sample and the percentages refigured based on the reduced totals, the curves for trained and untrained draw much closer together. In fact, the distributions for both groups become almost bimodal, with a peak in the 21-30 category and a second, somewhat less pronounced peak in the 41-50 category. Thus the two groups are remarkably well matched on age, except for volunteers under 21. There is a tendency for the untrained population to be younger (because of its concentration of student volunteers)—55% of the untrained are 30 years old or younger, versus 41% of the untrained (percentages based on the first three age categories combined). No one age category dominates either population in the sense that no category includes a majority of trained or untrained volunteers. Again, the mode age for untrained volunteers is "under 21," with secondary clusters in the 21-30 (24%) and 41-50 (17%) categories. The trained volunteers tend to cluster in two categories—21-30 (27%) and 41-50 (21%).

Table 3.2 shows that the very large difference in percentage of trained and untrained volunteers under 21 results primarily from an uneven distribution of Denver volunteers in that age group—four trained (8% of the Denver trained group) versus 21 untrained (44% of the Denver untrained group). Although Oxford has a very high percentage of volunteers under 21 (47% of its total volunteer population), they are about equally divided between the trained and untrained groups.

Table 3.3, a cross tabulation of the data on student status and age, documents that almost all of these youngest volunteers are students, as



*The upper limit of the age range was set at 80, since there are a few volunteers known to be in their seventies.

FIGURE 3.1. AGE DISTRIBUTION OF TRAINED AND UNTRAINED VOLUNTEERS, ALL CITIES

TABLE 3.2

TRAINED AND UNTRAINED VOLUNTEERS IN EACH AGE RANGE, BY CITY

Age Range	Denver		Oxford		St. Louis		San Francisco		Total	
	T	U	T	U	T	U	T	U	T	U
Under 21	4 6%	21 44%	22 44%	25 48%	2 4%	8 17%	3 6%	3 8%	31 14%	57 31%
21-30	12 18%	9 18%	16 32%	16 31%	11 20%	8 18%	20 40%	12 31%	59 27%	45 24%
31-40	13 19%	1 2%	8 16%	7 14%	8 14%	8 17%	8 16%	6 16%	37 17%	22 12%
41-50	22 32%	8 17%	3 6%	3 6%	11 20%	12 26%	11 22%	8 21%	47 21%	31 17%
51-60	9 13%	2 4%	1 2%	1 2%	13 24%	5 11%	4 8%	7 19%	27 12%	15 8%
Over 60	7 10%	7 15%	0 0%	0 0%	10 18%	5 11%	4 8%	2 5%	21 9%	14 8%
No response to question	1 2%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	1 0%	0 0%
Total	68 100%	48 100%	50 100%	52 100%	55 100%	46 100%	50 100%	38 100%	223 100%	184 100%

TABLE 3.3

AGES OF UPSWING STUDENT VOLUNTEERS, ALL CITIES

Student Status	<21	21-25	26-30	31-40	41-50	51-60	>60	NR	Total
Student	85	39	14	8	2	1	1	0	150
Nonstudent	1	14	27	37	57	24	13	0	173
Nonrespondent	2	4	6	14	19	17	21	1	84
Total	88	57	47	59	78	42	35	1	407

might be expected. From Table 3.2, there are 88 trained and untrained volunteers under 21. Table 3.3 shows that 85 of the volunteers who are under 21 are students.

There is variation in the age distribution of trained and untrained volunteers by city, as can be seen from examination of Figure 3.2. The most noteworthy difference is that Oxford has a much younger population of volunteers than the other cities. If we take 40 as a mid-point in the age ranges, 92% of all Oxford volunteers fall below that point (and almost two-thirds are 25 or younger). The other cities are all much closer to an even split over and under 40. San Francisco has 36% of its volunteers in the 21-30 range, while St. Louis has a slightly older population.

Sex

As shown in Table 3.4, the overwhelming majority (94%) of Upswing volunteers are female. Although the table does not include a breakdown by training status, the men are about equally divided between the trained and untrained groups.

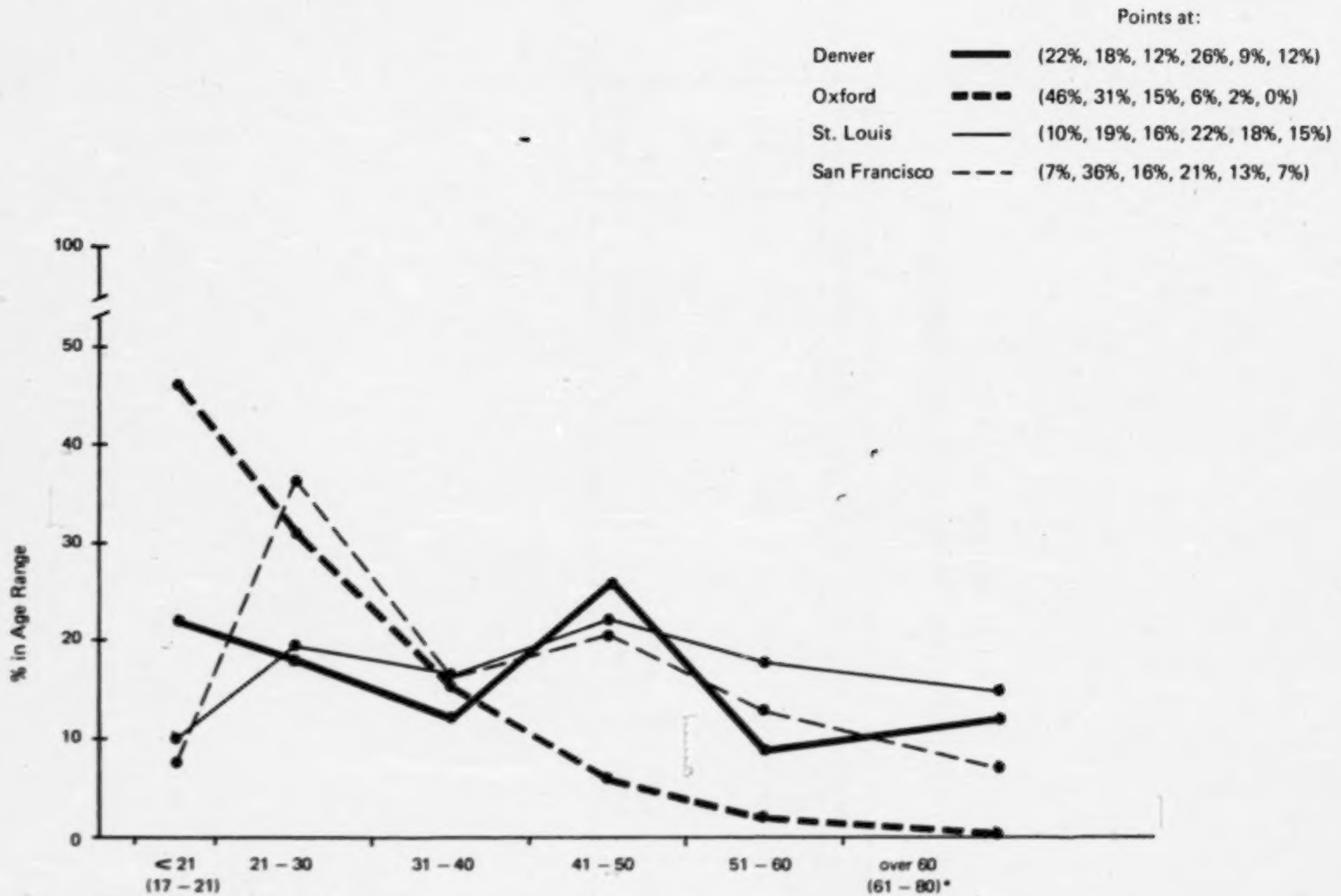
Marital Status

The majority of both the trained and untrained volunteers are married. Figure 3.3 shows that married volunteers far outnumber the single volunteers in the trained group. The difference is small in the untrained group, another reflection of the concentration of students in that group.

Figure 3.4 shows that the volunteer populations in the four cities vary in marital status, but married people predominate in all cities except Oxford. The high percentage of single volunteers in that city can again be related to its high percentage of student volunteers.

Family Income

Figure 3.5 is a cumulative diagram showing what percentages of the total trained and untrained populations are represented as family income increases through successive steps up the scale. Most importantly, the figure indicates that Upswing volunteers, both trained and untrained, probably tend



*The upper limit of the age range was set at 80, since there are a few volunteers known to be in their seventies.

FIGURE 3.2. AGE DISTRIBUTION OF VOLUNTEERS, BY CITY

(Nonresponse to question: Denver 1%.)

TABLE 3.4

SEX DISTRIBUTION OF UPSWING VOLUNTEERS, BY CITY

Sex	Denver	Oxford	St. Louis	San Francisco	Total
Female	111 96%	97 95%	96 95%	78 92%	382 94%
Male	5 4%	5 5%	5 5%	10 8%	25 6%
Total	116 100%	102 100%	101 100%	88 100%	407 100%

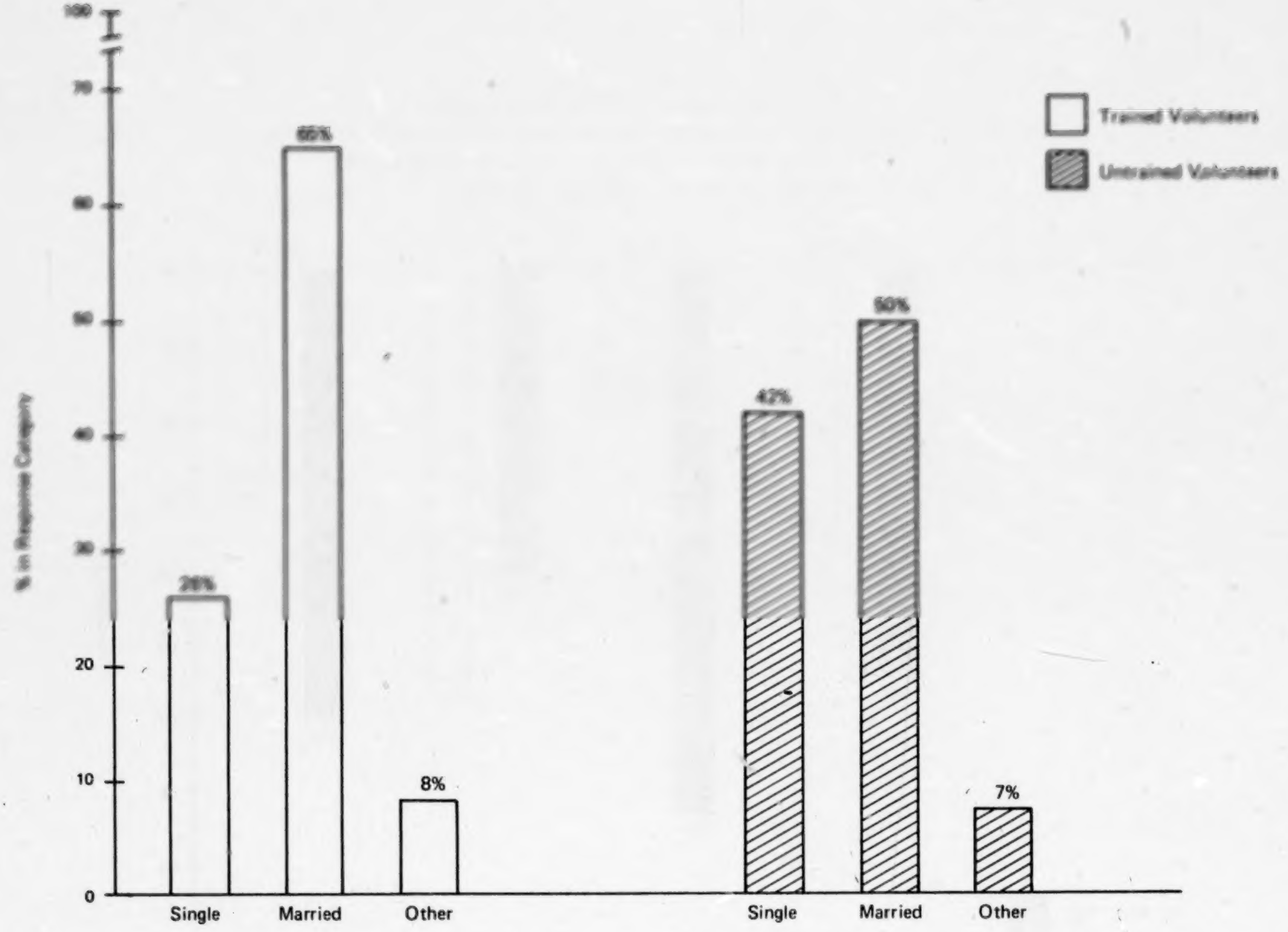


FIGURE 3.3. MARITAL STATUS OF TRAINED AND UNTRAINED VOLUNTEERS, ALL CITIES

("Other" category includes separated, divorced, and widowed volunteers. Nonresponse to question: 1% trained, 1% untrained.)

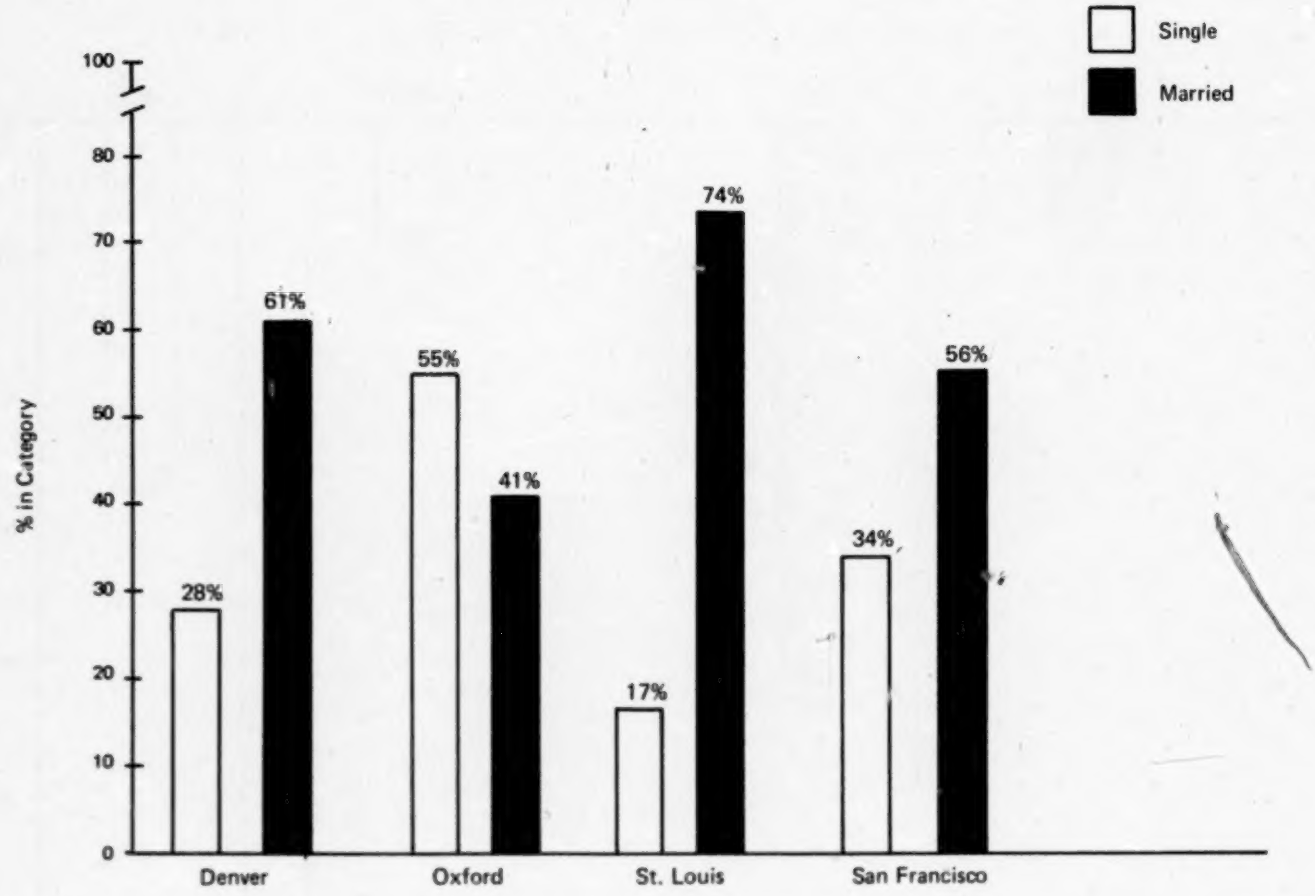


FIGURE 3.4. MARITAL STATUS OF VOLUNTEERS, BY CITY
(The "other" category is omitted from the figure.
Nonresponse rates: Denver 1%, Oxford 2%, St. Louis 1%,
San Francisco 0%, Total 1%.)

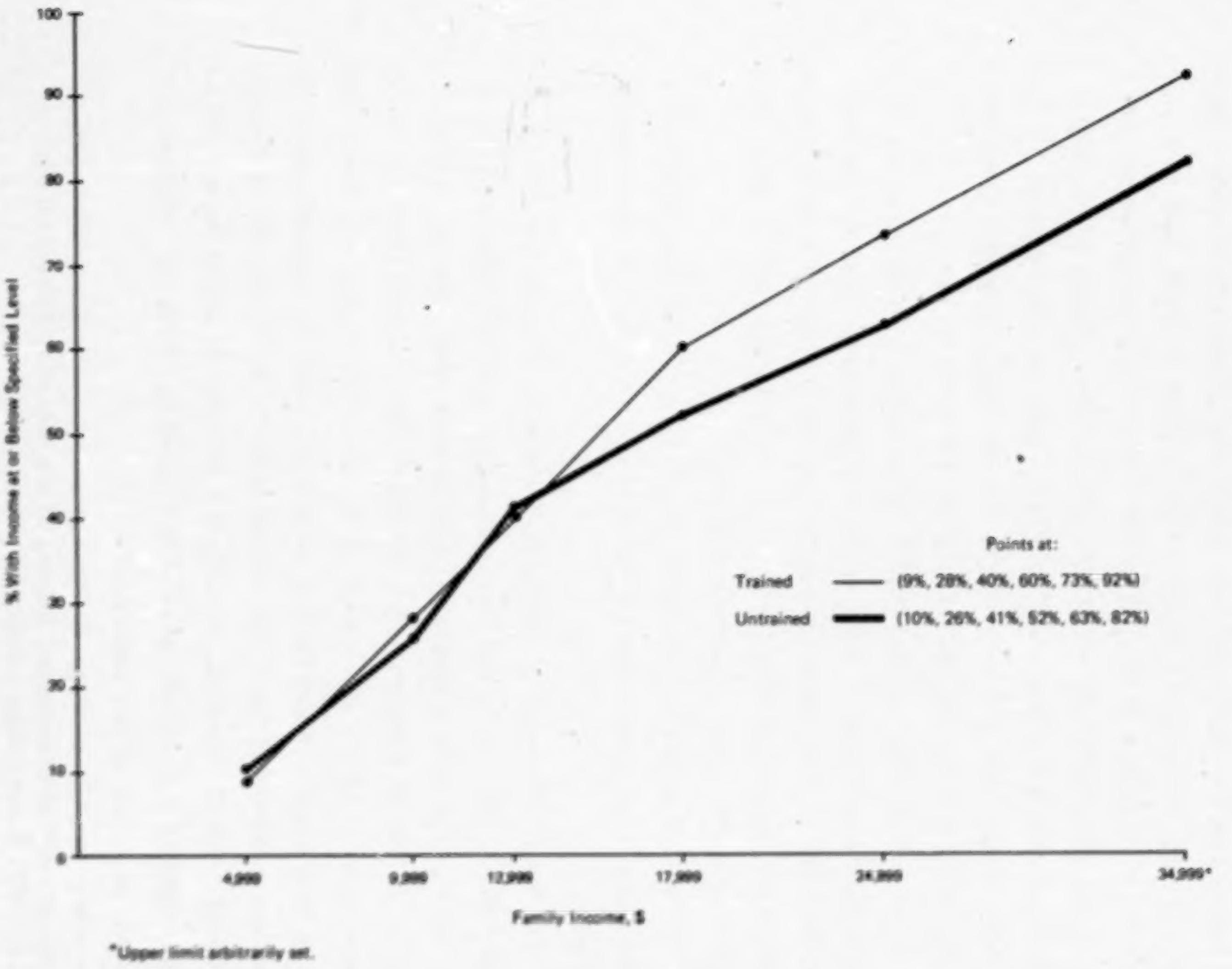


FIGURE 3.5. TRAINED AND UNTRAINED VOLUNTEERS' FAMILY INCOME, ALL CITIES
(Nonresponse to question: 8% trained, 18% untrained, total 13%.)

to have above-average income. A minimum of about 60% of the respondents in both groups have family income above the 1970 national average for a family of four, $12,414 according to the Census Bureau's Family Income Division.[3] It also appears that the two groups are fairly well matched on income. About 10% of both groups have family income of $0-$4,999; slightly more than one-fourth of both have income of $9,999 or less (28% of the trained volunteers and 26% of the untrained); and about 40% of both have income of $12,999 or less. Eight percent fewer untrained volunteers have income between $12,999 and $17,999, which causes the two curves to diverge. About the same percentage has income from $17,999-$24,999 and above $24,999.

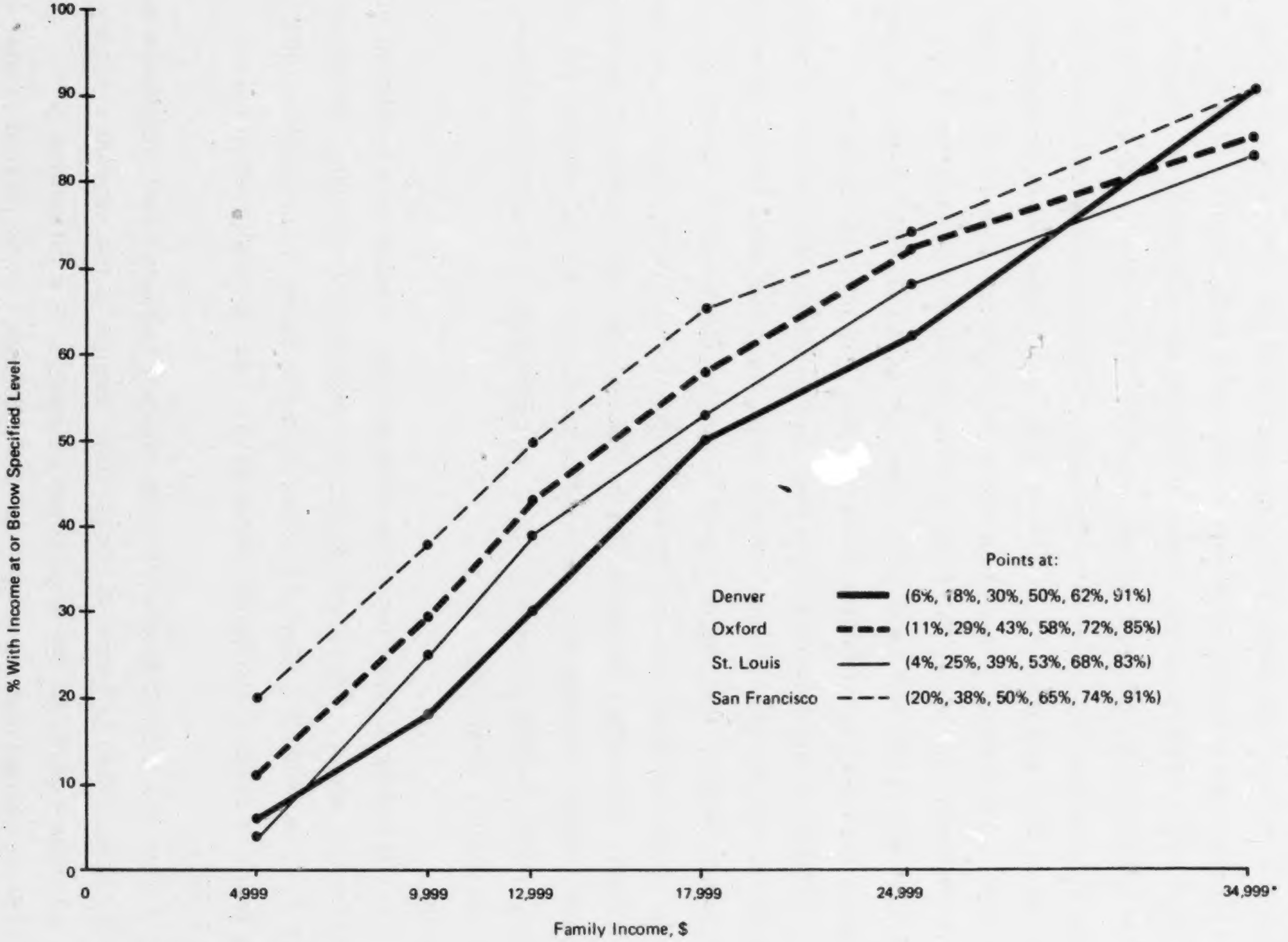
It should be noted a considerable percentage of volunteers did not answer the income question. Moreover, the nonresponse rates for the two groups differ: 8% of the trained volunteers did not answer the income question, while 18% of the untrained did not answer. It is possible that the data on nonrespondents would alter the income distributions.

Figure 3.6 permits examination of volunteer family income by city. Again, the rather high nonresponse requires caution in drawing conclusions from the data.

The figure shows quite similar distributions of volunteers by family income in Oxford, St. Louis, and San Francisco. The most important difference for these cities is in percentage of volunteers at the lowest level of family income. The percentage of Oxford respondents at that level is almost three times as great as the percentage of St. Louis respondents at that level, although in both cases the percentage are low (11% and 4% respectively). San Francisco has a relatively high representation (20%) at the $4,999-or-below level, almost twice the percentage of Oxford volunteers in that income category. This reduces the overall level of San Francisco volunteer income as compared to the levels in the other cities.

---

[3] U.S. Department of Commerce, Bureau of the Census, Family Income Division (1971 survey data obtained by telephone).



*Upper limit arbitrarily set.

FIGURE 3.6. VOLUNTEERS' FAMILY INCOME, BY CITY
(Nonresponse to question: Denver 9%, Oxford 15%, St. Louis 17%,
San Francisco 9%, total 13%.)

The other important point to be made from Figure 3.6 is that the Denver respondents are more affluent than those from the other cities, particularly those from San Francisco. Seventy percent of the Denver respondents reported income above $12,999 per year, while 61% in St. Louis, 57% in Oxford, and 50% in San Francisco reported income above that level. (Again, the national average for a family of four was $12,414 in 1970.) The difference is largely attributable to the lower percentage of Denver respondents with income below $5,000 and from $5,000 to $9,999, and to the higher percentage with income of $25,000 or more. Regardless of these differences, it is clear that at least those who responded tend to have above-average income in all cities except San Francisco, and even there, one-fifth of those who answered the question said they have family income of $25,000 per year or more.

Although it appears that there may be significant differences in volunteer income among the four cities, the nonresponse rates make these differences at least questionable. One might expect volunteer income to be lowest in Oxford, because the income of the general population is lower there (as is the cost of living). However, based on the available data, such does not seem to be the case. Again the question about college student status arises. Oxford has a great many student volunteers (70%) who probably were reporting their parents' income as their own.

Occupation

The majority of Upswing volunteers are homemakers (not employed full-time outside the home). The other important occupational category, as shown in Figure 3.7, is student. (The percentages in the figure do not add to 100% because there is overlap among the categories. This is analyzed on pages 3.20 to 3.22.)

Figure 3.7 also indicates that the trained and untrained volunteers are reasonably comparable in terms of occupation, except in the student category and, to a lesser extent, in the homemaker category. The difference (28% versus 48%) in trained and untrained who are students can be related to the disproportionate number of untrained volunteers under 21 in Denver (see

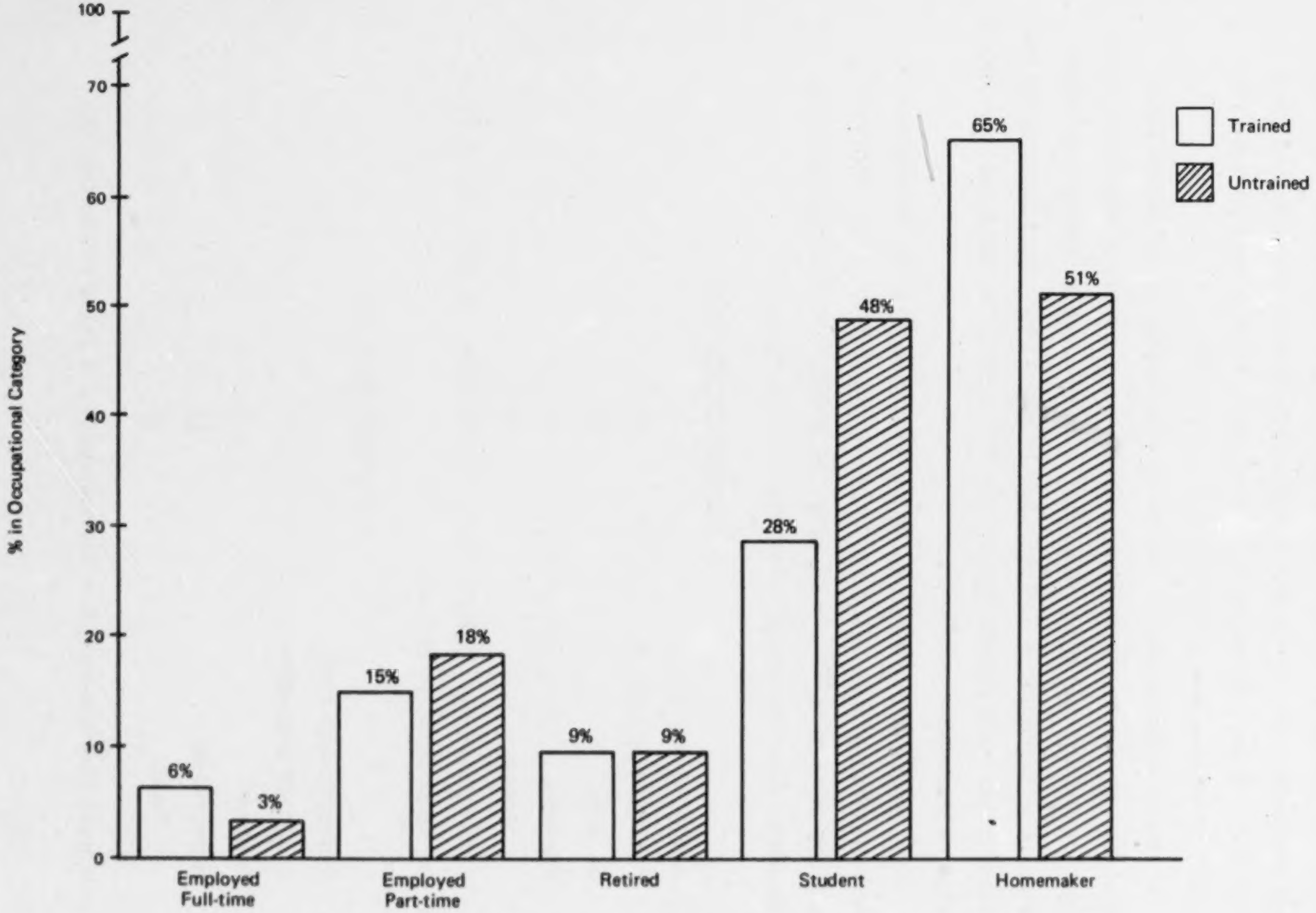


FIGURE 3.7. OCCUPATION OF TRAINED AND UNTRAINED VOLUNTEERS, ALL CITIES

(Percentages exceed 100% because volunteers may be in more than one category.)

Table 3.2). As indicated in Table 3.3, almost all of these very young volunteers are students. The higher percentage of students in the untrained group is reflected in a lower percentage of homemakers in that group compared with the trained, of whom a strong majority are homemakers.

Table 3.5 shows that the cities are comparable in all occupational categories except, again, student and homemaker. Looking at the cities without regard for training status of volunteers, Oxford's heavy student population is evident. Correspondingly, Oxford tends to have fewer homemakers compared to the other cities, particularly Denver and St. Louis. The latter has the largest percentage of homemaker volunteers.

Obviously, from Table 3.5, some volunteers consider themselves in more than one occupational category. Some of the overlaps were identified through cross tabulation.[4/] For example, 69 people who checked that they are homemakers also checked at least one other category:

	Homemaker (N = 237)
Employed full-time:	1
Employed part-time:	24
Retired:	22
Student:	22
Total:	69

Of the 150 volunteers who indicated they are students, 66 put themselves in at least one other category as well:

	Students (N = 150)
Employed full-time:	7
Employed part-time:	37
Retired:	0
Homemaker:	22
Total:	66

[4/] If a volunteer checked more than two categories it could not be traced.

TABLE 3.5

VOLUNTEER OCCUPATION, BY CITY*

Occupational Category	Denver (N = 116)	Oxford (N = 102)	St. Louis (N = 101)	San Francisco (N = 88)	Total (N = 407)
Employed full-time	6 5%	1 1%	3 3%	9 10%	19 5%
Employed part-time	14 12%	15 15%	21 21%	17 19%	67 16%
Retired	13 11%	0 0%	11 11%	13 15%	37 9%
Student	32 28%	71 55%	22 22%	25 29%	150 37%
Homemaker	70 60%	41 40%	79 78%	47 53%	237 58%
Total	135 116%	128 126%	136 135%	111 126%	510 125%

*Totals shown in table exceed actual number of volunteers in each city because volunteers may be in more than one occupational category. Percentages based on actual numbers of volunteers (N) and therefore do not add to 100%.

As shown above, there are no volunteers who are both retired and are students. There are, however, 22 retired people who also indicated they are homemakers and three who are employed part-time. No retired volunteers said they are employed full-time.

The 86 volunteers employed either full- or part-time are 21% of the total population. Table 3.6 shows that about half of these people (10% of the total population) are clerical employees. Another 20% (4% of the total) are in professional, technical, or managerial jobs.

Education

The Upswing volunteers have had considerable education and the trained and untrained (all cities combined) are very similar in this characteristic (Figure 3.8). The distribution is normal, with a substantial majority of both groups falling in the middle category—"Some College Through College Graduate." The distributions are similar for all cities (Table 3.7). An average of 66% of the volunteers have had some college or have bachelor's degrees. On either end of the education spectrum, an average of 18% have a high school education or less and 15% have attended graduate school or hold advanced degrees.

The volunteers who attended college were asked on the registration form to specify area of concentration. However, so few volunteers answered this question that the data are not useful.

All volunteers were asked whether they had any previous formal training in child development before joining Project Upswing, and about one-third of the total population indicated they had. As can be seen in Figure 3.9, the trained and untrained are almost identical in this characteristic: 34% of the trained and 35% of the untrained said they have had such training. Looking at the volunteers by city, as in Figure 3.10, the percentages are very similar. About a third of the population in all locations had background in child development before Upswing.

TABLE 3.6

JOB TYPES OF EMPLOYED VOLUNTEERS, ALL CITIES

Occupation	Employed Full-Time	Employed Part-Time	Total
Farming, fishery, forestry	0	1	1 1%
Professional, technical, managerial	9	8	17 20%
Unskilled, semiskilled	1	0	1 1%
Service	2	5	7 8%
Sales	2	5	7 8%
Clerical	3	37	40 47%
Other	2	7	9 10%
No response to question	0	4	4 5%
Total	19	67	86 100%

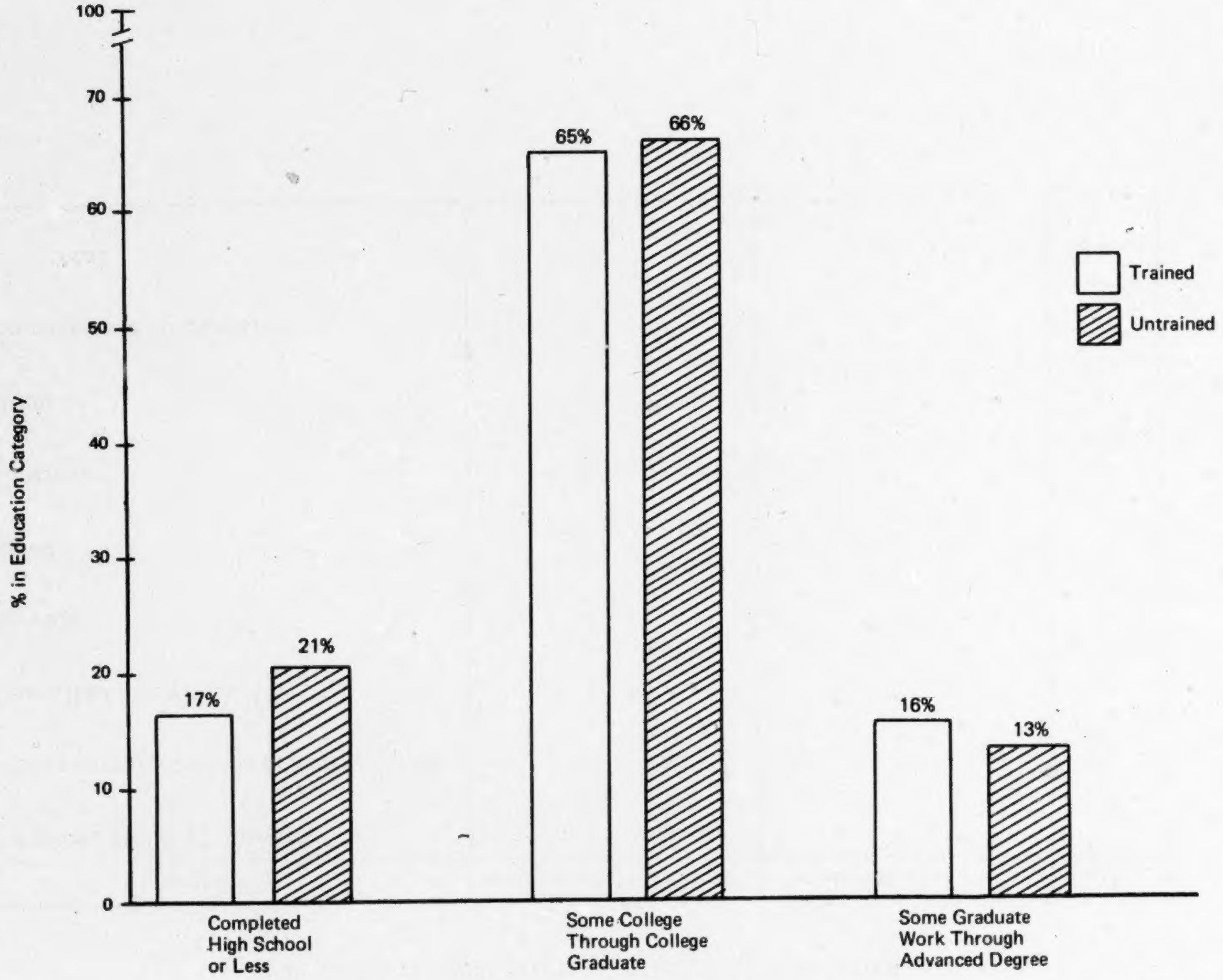


FIGURE 3.8. TRAINED AND UNTRAINED VOLUNTEERS' LEVEL OF EDUCATION, ALL CITIES
(Nonresponse rates: 2% trained, 0% untrained, total 1%.)

TABLE 3.7

VOLUNTEERS' LEVEL OF EDUCATION, BY CITY

Highest Level of Education	Denver	Oxford	St. Louis	San Francisco	Total
Completed high school or less	22 19%	13 13%	24 24%	16 18%	75 18%
Some college-college graduate	71 61%	80 78%	66 65%	51 58%	268 66%
Some graduate school-advanced degree	23 20%	8 8%	9 9%	20 23%	60 15%
No response to question	0 0%	1 1%	2 2%	1 1%	4 1%
Total	68 100%	102 100%	101 100%	88 100%	407 100%

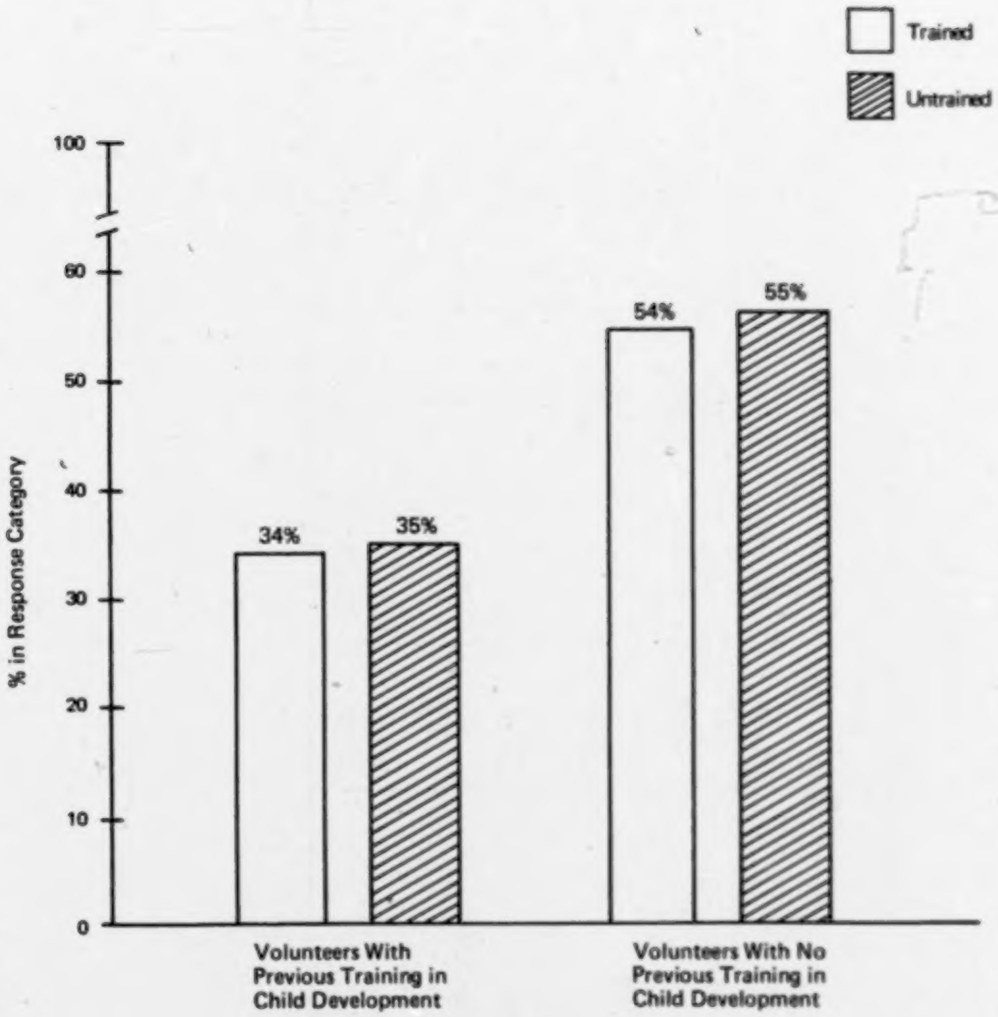


FIGURE 3.9. TRAINED AND UNTRAINED VOLUNTEERS' PREVIOUS FORMAL TRAINING IN CHILD DEVELOPMENT, ALL CITIES

(Nonresponse rates: 12% trained, 10% untrained; total 11%.)

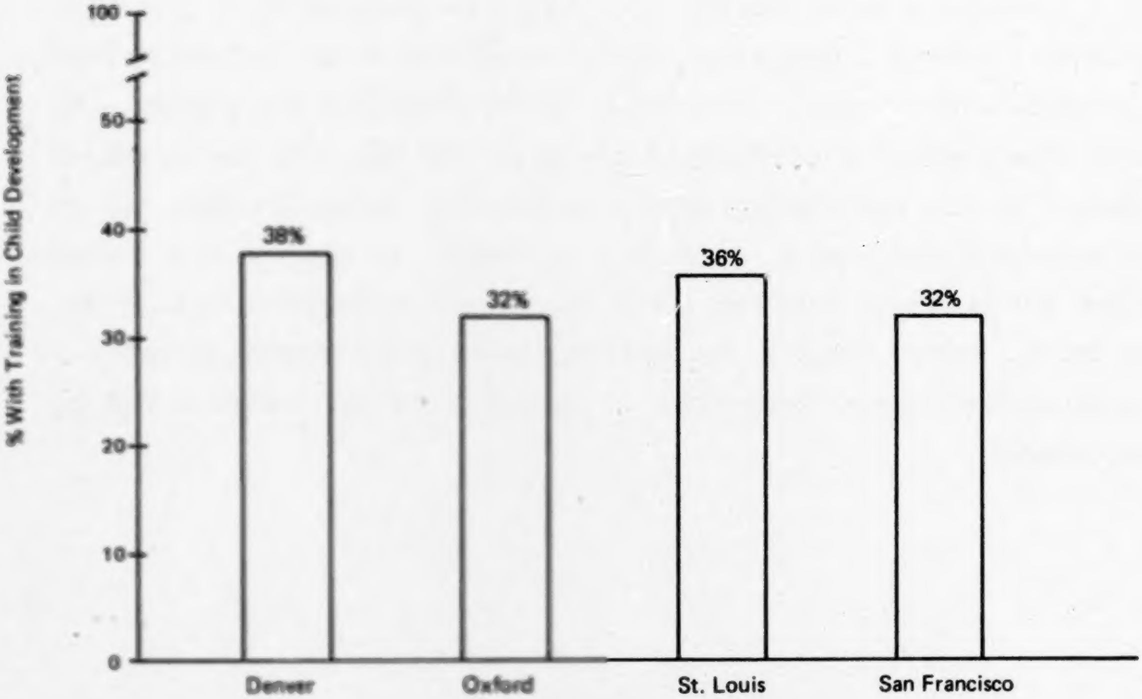


FIGURE 3.10. VOLUNTEERS WITH FORMAL TRAINING IN CHILD DEVELOPMENT, BY CITY

(Nonresponse rates: Denver 12%, Oxford 15%, St. Louis 7%, San Francisco 10%; total 11%.)

Related Prior Experience

Over half of both the trained and untrained volunteers had prior experience as tutors, teachers, or teacher aides before joining Project Upswing. Figure 3.11 gives a breakdown by training status and specific type of experience for the project as a whole. The figure points up a remarkable similarity, project-wide, between the tutoring/teaching background of the trained and untrained populations. The differences between the percentages of trained and untrained with teaching experience and with no experience is not important, considering the sizes of the populations and the nonresponse rates.

Table 3.8 shows that the volunteers in the different cities also have comparable relevant experience. Oxford has the most volunteers with no pre-Upswing tutoring or teaching experience, but the difference is not great. One would expect more of a difference in view of the fact that there was no school volunteer program in Oxford before Project Upswing. Apparently about half of the Oxford volunteers gained experience elsewhere. St. Louis and, to a lesser extent, San Francisco have more people who have served previously as volunteer tutors. Again, however, the difference is small and unlikely to have a bearing on the relative effectiveness of the volunteers there versus in Denver and Oxford.

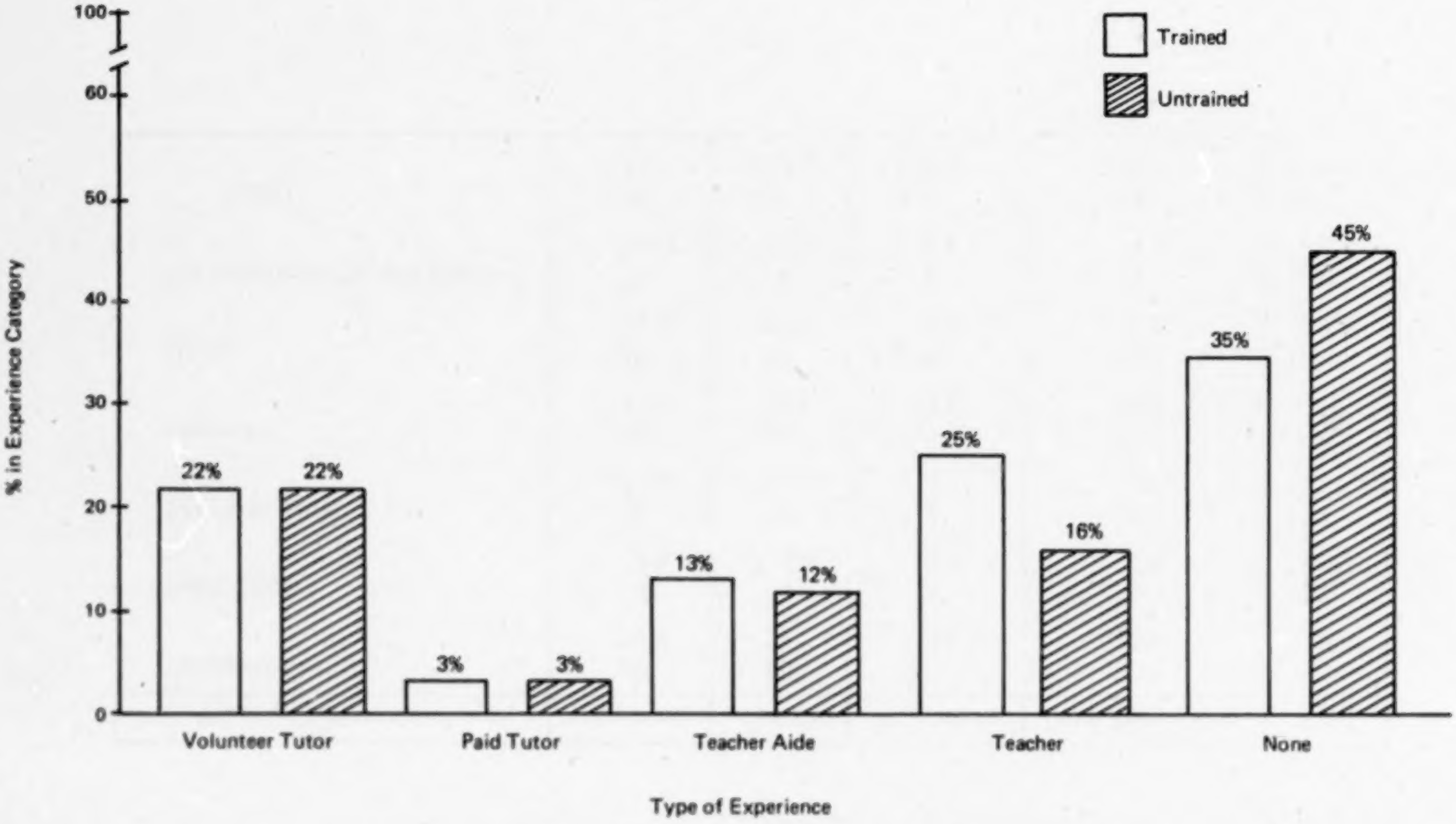


FIGURE 3.11. TRAINED AND UNTRAINED VOLUNTEERS' PREVIOUS TEACHING OR TUTORING EXPERIENCE, ALL CITIES
(Nonresponse rates: 2% trained, 2% untrained.)

TABLE 3.8

VOLUNTEERS' PREVIOUS TEACHING OR TUTORING EXPERIENCE, BY CITY

Type of Experience	Denver	Oxford	St. Louis	San Francisco	Total
Volunteer tutor	20 17%	15 15%	31 30%	23 26%	89 22%
Paid tutor	4 4%	3 3%	4 4%	1 1%	12 3%
Teacher aide	20 17%	13 13%	6 6%	13 15%	52 13%
Teacher	25 22%	20 19%	23 23%	17 19%	85 21%
None	42 36%	50 49%	36 36%	33 38%	161 39%
No response to question	5 4%	1 1%	1 1%	1 1%	8 2%
Total	116 100%	102 100%	101 100%	88 100%	407 100%

IV. PROFILE OF TEACHERS

PURPOSE

The purpose of this section is to present background information about the teachers involved in Project Upswing, with emphasis on their education and experience. All information is presented for the overall teacher population as well as for individual city populations.

DATA SOURCE

A registration form developed by ORI was distributed to teachers during the teacher orientation sessions held in the cities in the early fall. For those teachers who did not attend the session or did not return the form, a personal follow-up was to be conducted by the individual project directors. A sample copy of the form is in the appendix to this report. All teachers (130) who volunteered to participate in Upswing are included in this profile.

SUMMARY OF TEACHER CHARACTERISTICS

- The Upswing teachers tend to be young. Thirty-eight percent are between 21 and 30 years old. The heaviest concentrations of young teachers are found in Oxford and St. Louis.

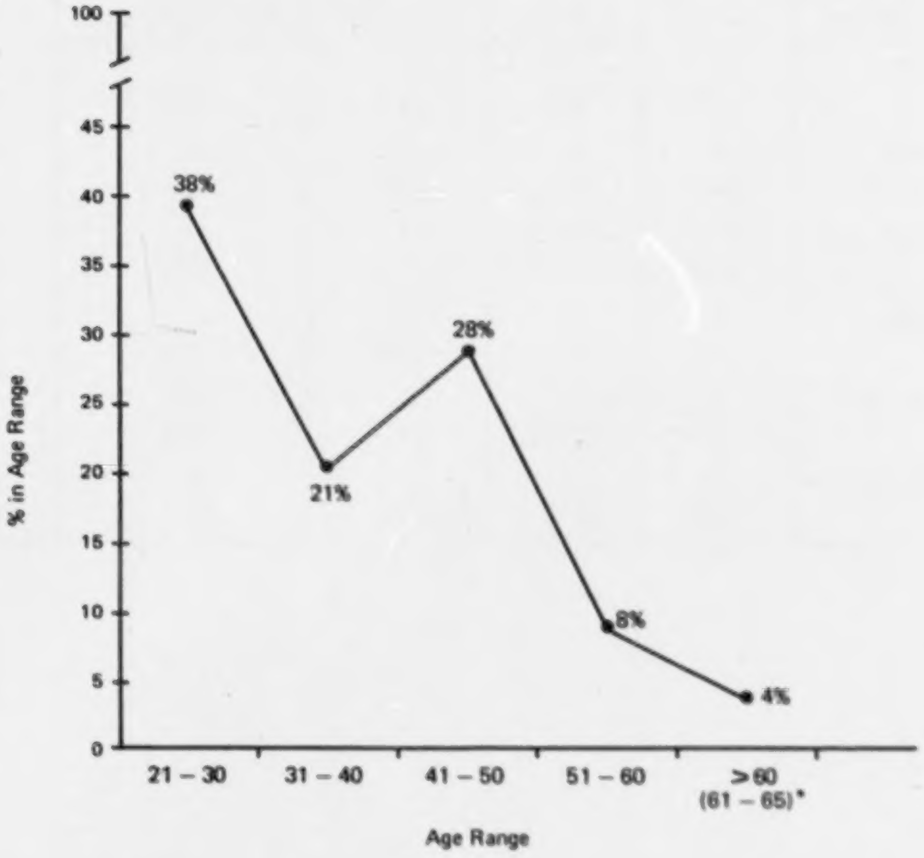
- Ninety-seven percent of all teachers are college graduates. Of these, 87% checked bachelor's degree as their highest degree earned, with only a small percentage holding any advanced degree.
- Over half of the teachers had some training in education of children with learning problems prior to their participation in Upswing. Generally this training was at the graduate level.
- A large majority of the teachers have three or more years of experience in the profession (regardless of grade level taught), yet more than one-third are new (0-2 years) at teaching first grade.
- Almost all Denver and San Francisco teachers, and about two-thirds of Oxford's, had worked with aides or volunteers before Upswing. Only about a third of the teachers in St. Louis had any such assistance before their participation in Upswing.

TEACHER CHARACTERISTICS

Age

The skewed curve in Figure 4.1 shows that the teachers involved in Project Upswing tend to be young. The modal age range for teachers in the four cities combined is 21-30. However, Figure 4.1 does show a second peak in the age range of 41-50.

There are differences among the cities in age distribution of teachers (Table 4.1). The modal age range in Denver is 41-50 and in all other cities it is 21-30. In San Francisco, however, the modal tendency is weak; the teachers there are quite evenly distributed over the range from 21-50. In Oxford, although the most common teacher age range is 21-25, there is also a large percentage in the 31-40 category. It can be said that all cities have rather high percentages of young teachers (30 years old or younger). Oxford



*Typical retirement age, 65, was chosen as the upper limit of the age range for this graph.

FIGURE 4.1. AGE DISTRIBUTION OF TEACHERS, ALL CITIES

TABLE 4.1

TEACHER AGE, BY CITY

Age Range	Denver	Oxford	St. Louis	San Francisco	Total
21-30	17 35%	9 47%	11 44%	13 35%	50 38%
31-40	7 14%	6 32%	3 12%	12 32%	28 22%
41-50	21 43%	1 5%	4 16%	11 30%	37 28%
51-60	3 6%	2 11%	4 16%	1 3%	10 8%
Over 60	1 2%	1 5%	3 12%	0 0%	5 4%
Total	49 100%	19 100%	25 100%	37 100%	130 100%

has a much younger teacher population than the other cities; Denver has the oldest teacher population.

Education

Figure 4.2 shows that 87% hold bachelor's degrees (their highest degree earned), while 10% have earned master's degrees and 1% have earned Ph.Ds. Only about 1% had less than a bachelor's degree.

In all four cities (Table 4.2), the teachers are similar in level of education, although Oxford and St. Louis have considerably higher percentages of teachers with advanced degrees (M.A., M.S., or Ph.D.). Twenty-one percent of the Oxford teachers and 20% of those in St. Louis have earned advanced degrees, versus 8% in Denver and 5% in San Francisco.

Figure 4.3 shows that 55% of all Upswing teachers have had some previous training in education of children with learning problems (71 teachers). Denver and San Francisco teachers tend to have had more of this special training than the teachers in Oxford and St. Louis. The breakdown on level of training (Table 4.3) indicates that 77% of those with training had it at the graduate level.

Teaching Experience

Figure 4.4 shows, for the project as a whole, a fairly even distribution of teaching experience over a range from 0-2 years in the profession to 16 or more years. From the by-city breakdown, Table 4.4, Oxford (37%) and St. Louis (40%) have more new teachers, by far, than the other two cities. The other differences among the cities are not believed to be important, although it is interesting that the St. Louis teachers tend to be novices or long-term veterans.

Thirty-seven percent of all Upswing teachers (Figure 4.5) are new (i.e., 0-2 years' experience) to teaching first grade. Denver has more experienced first-grade teachers than the other three cities, as indicated in Table 4.5. On the whole, the Upswing teachers are less experienced at the first-grade level than their total years in the profession might lead one to expect.

Experience With an Aide or Volunteer

Figure 4.6 clearly indicates that working with an aide or volunteer is not a new experience for the Upswing teachers—77% have had such assistance in the past. The by-city table, Table 4.6, however, shows significant differences among the cities. Close to 100% of the teachers in both Denver and San Francisco have worked with an aide or volunteer before. Teachers in Oxford and St. Louis have less experience. Sixty-three percent in Oxford said they have previously worked with an aide, and only 31% in St. Louis said they had any such experience before their participation in Upswing.

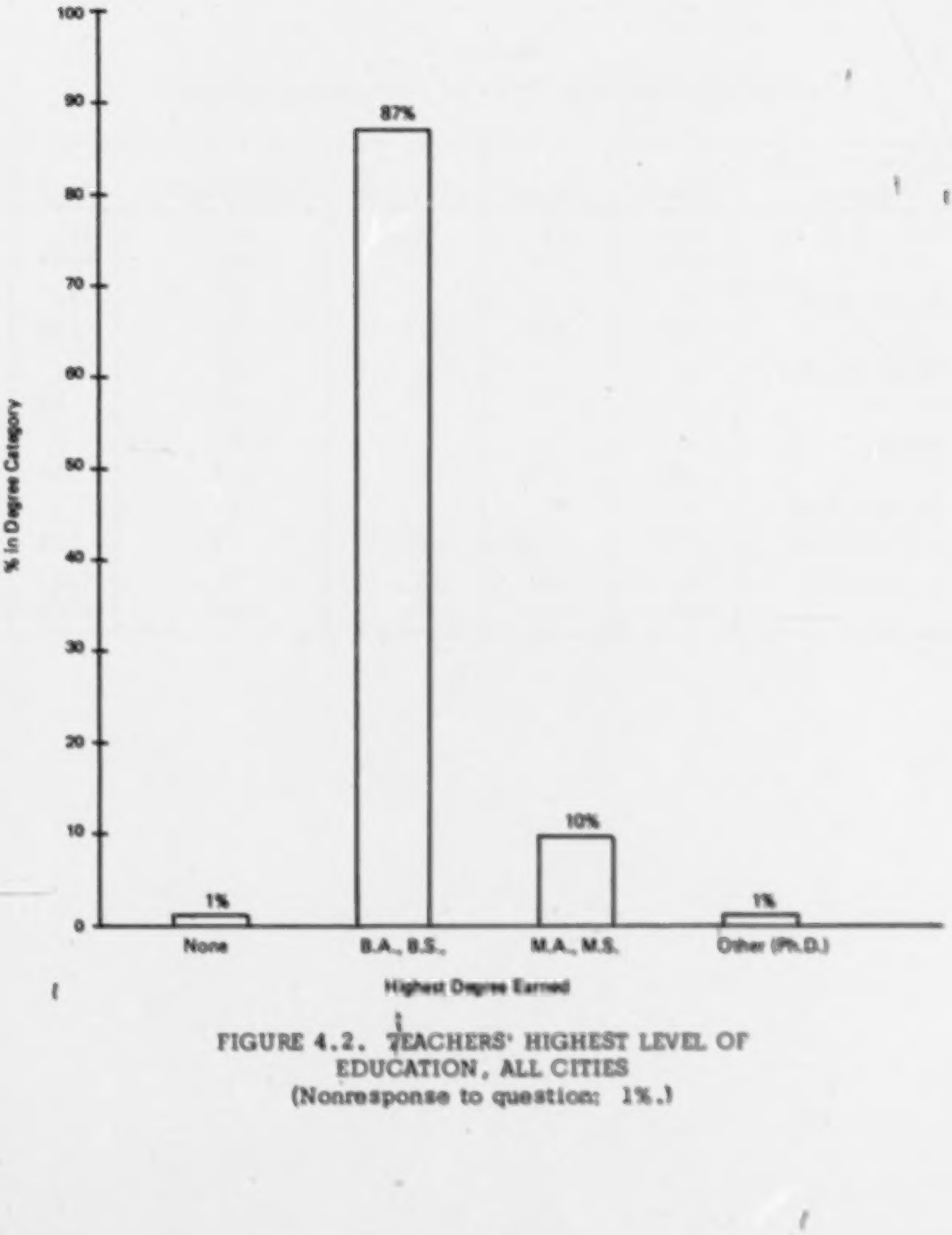


FIGURE 4.2. TEACHERS' HIGHEST LEVEL OF EDUCATION, ALL CITIES
(Nonresponse to question: 1%.)

TABLE 4.2

TEACHERS' HIGHEST LEVEL OF EDUCATION, BY CITY

Highest Degree Earned	Denver	Oxford	St. Louis	San Francisco	Total
B.A., B.S.	45 92%	14 74%	19 76%	35 95%	113 87%
M.A., M.S.	4 8%	3 16%	5 20%	2 5%	14 10%
Other (Ph.D.)	0 0%	1 5%	0 0%	0 0%	1 1%
None	0 0%	0 0%	1 4%	0 0%	1 1%
No response to question	0 0%	1 5%	0 0%	0 0%	1 1%
Total	49 100%	19 100%	25 100%	37 100%	130 100%

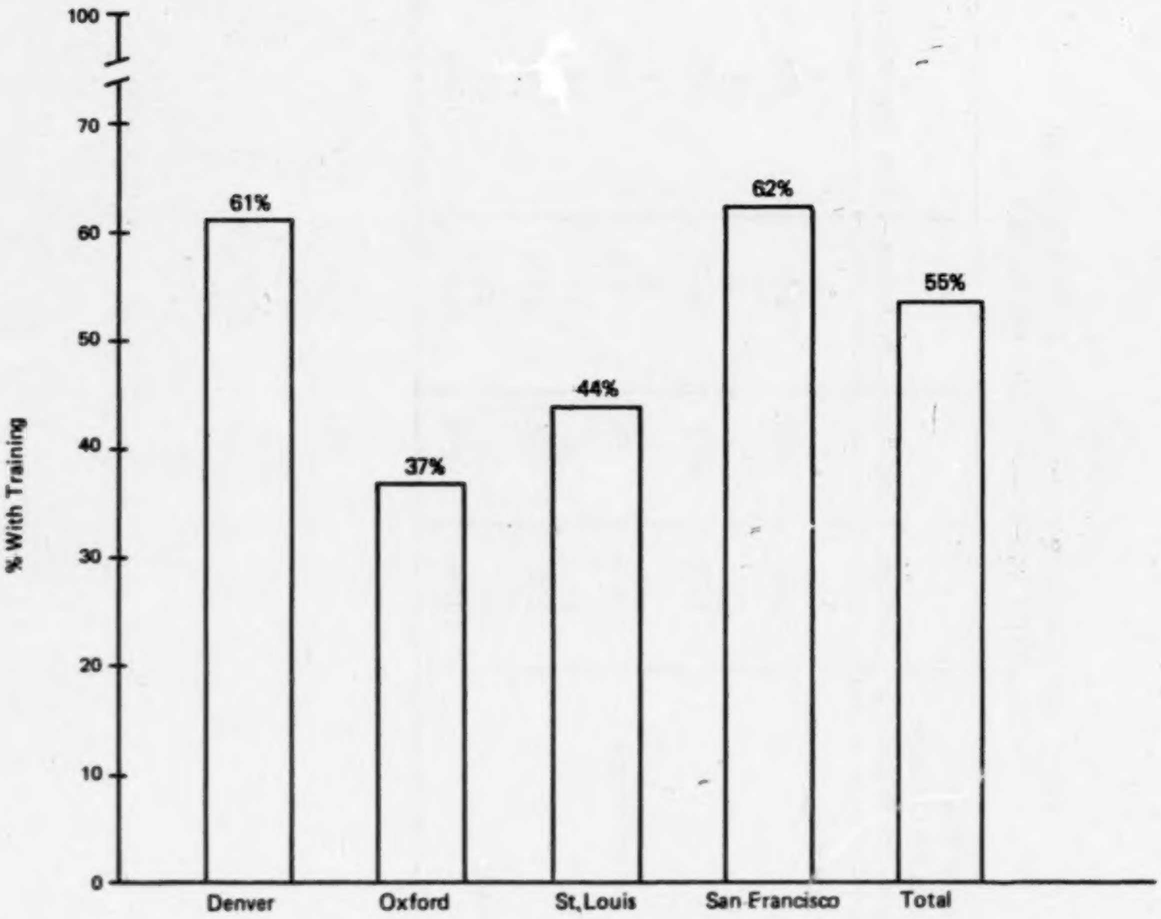


FIGURE 4.3. PRIOR TEACHER TRAINING IN EDUCATION OF CHILDREN WITH LEARNING PROBLEMS, BY CITY
(Percentage of each city's teacher population and percentage of total population.)

TABLE 4.3

LEVEL OF TEACHER TRAINING IN EDUCATION OF CHILDREN WITH LEARNING PROBLEMS

Course Work in Education of Children With Learning Problems	Denver	Oxford	St. Louis	San Francisco	Total
Undergraduate	6 12%	3 16%	4 16%	5 13%	18 14%
Graduate	21 43%	3 16%	6 24%	17 46%	47 36%
Other e.g., workshops	3 6%	1 5%	1 4%	1 3%	6 5%
None	19 39%	12 63%	14 56%	14 38%	59 45%
Total	49 100%	19 100%	25 100%	37 100%	130 100%

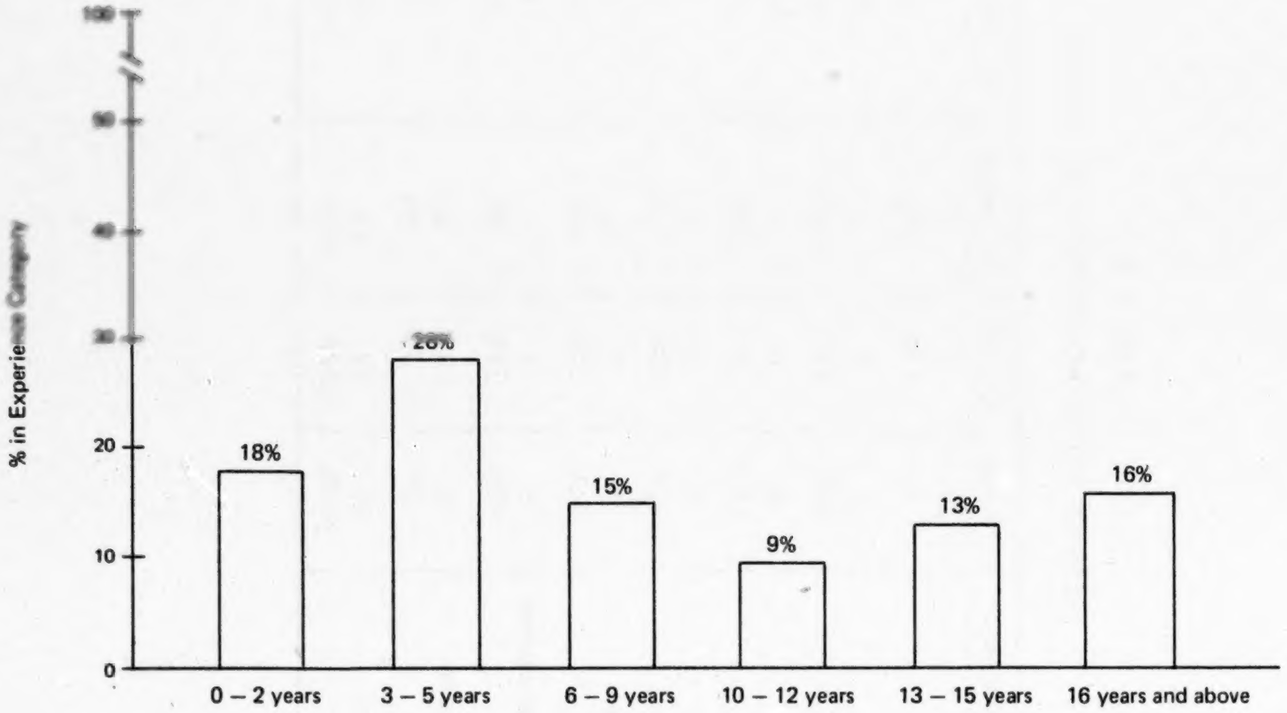


FIGURE 4.4. YEARS OF TEACHING EXPERIENCE, ALL CITIES
(Nonresponse to question: 1%.)

TABLE 4.4

YEARS OF TEACHING EXPERIENCE, BY CITY

Years of Experience	Denver	Oxford	St. Louis	San Francisco	Total
0-2 years	2 4%	7 37%	10 40%	4 11%	23 18%
3-5 years	17 35%	4 21%	3 12%	12 32%	36 28%
6-9 years	8 16%	0 0%	1 4%	10 27%	19 15%
10-12 years	6 13%	4 21%	0 0%	2 5%	12 9%
13-15 years	7 14%	0 0%	6 23%	4 11%	17 13%
16 years and above	9 18%	3 16%	5 19%	5 14%	22 16%
No response to question	0 0%	1 5%	0 0%	0 0%	1 1%
Total	49 100%	19 100%	25 100%	37 100%	130 100%

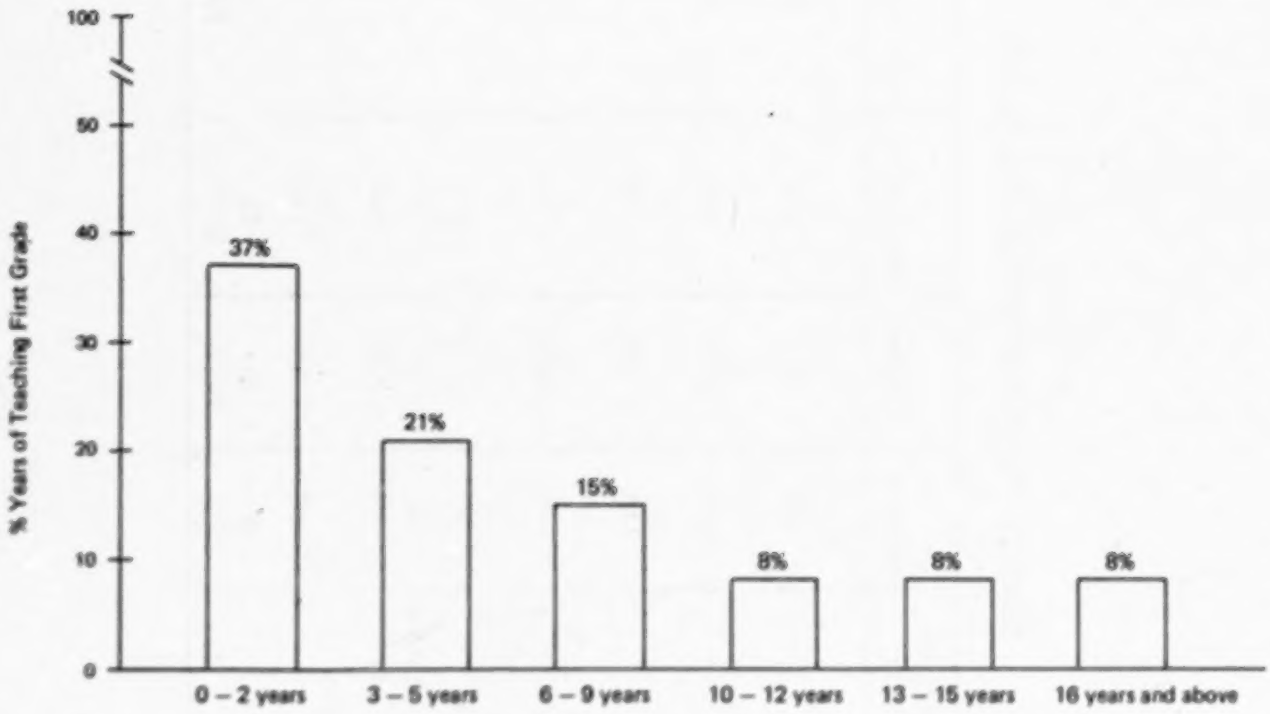


FIGURE 4.5. YEARS OF TEACHING FIRST GRADE, ALL CITIES
(Nonresponse to question: 3%.)

TABLE 4.5

YEARS OF TEACHING FIRST GRADE, BY CITY

Years of Teaching First Grade	Denver	Oxford	St. Louis	San Francisco	Total
0-2 years	11 23%	8 42%	10 40%	19 51%	48 37%
3-5 years	12 24%	2 11%	3 12%	10 27%	27 21%
6-9 years	14 29%	0 0%	2 7%	4 11%	20 15%
10-12 years	5 10%	4 21%	1 4%	0 0%	10 8%
13-15 years	3 6%	1 5%	3 12%	3 8%	10 8%
16 years and above	4 8%	3 16%	3 12%	1 3%	11 8%
No response to question	0 0%	1 5%	3 12%	0 0%	4 3%
Total	49 100%	19 100%	25 100%	37 100%	130 100%

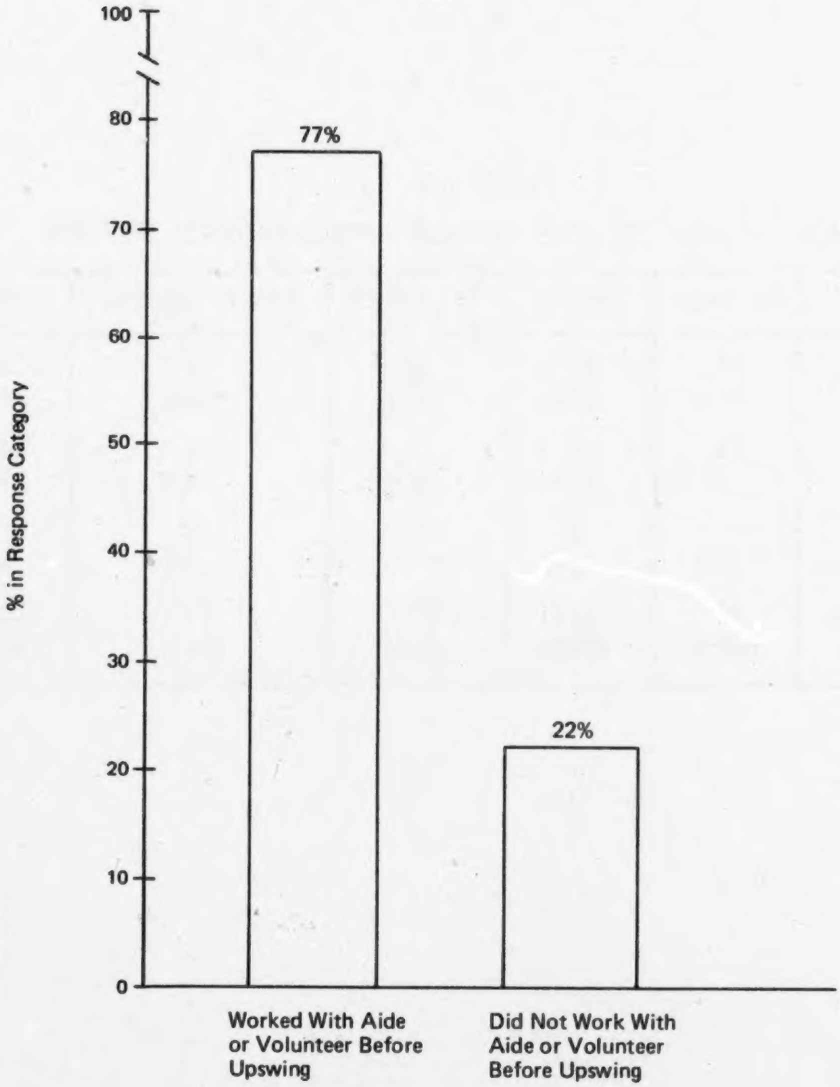


FIGURE 4.6. TEACHERS' EXPERIENCE WITH AN AIDE OR VOLUNTEER, ALL CITIES
(Nonresponse to question: 1%.)

TABLE 4.6

TEACHER EXPERIENCE WITH AN AIDE OR VOLUNTEER, BY CITY

Response	Denver	Oxford	St. Louis	San Francisco	Total
Yes	46 94%	12 63%	8 31%	35 95%	101 77%
No	2 4%	7 37%	17 68%	2 5%	28 22%
No response to question	1 2%	0 0%	0 0%	0 0%	1 1%
Total	49 100%	19 100%	25 100%	37 100%	130 100%

V. FIRST IMPRESSIONS OF PROJECT UPSWING

PURPOSE

This section presents the initial opinions about Project Upswing expressed by the volunteer tutors, teachers, and parents involved. The volunteer impressions are analyzed for the project as a whole by training status of volunteers, as well as by city. Teacher impressions also are analyzed for the whole project and by city. Selected volunteer and teacher impressions are then compared. Only the Denver parents' first impressions are presented, because of insufficient response from the other cities.

This section is included in the final report on Upswing's first year to document how the project was perceived in the early stages of tutoring. Elements of these attitude data also were explored for impact on change in children's achievement, as described in Volume II, Section II.

DATA SOURCE

The data presented in this section were taken from three "First Impressions Questionnaires," one for each of the above categories of participants, developed by the ORI study team with review and consultation by the U.S. Office of Education. (Copies of the questionnaires appear in the appendix to this report.) Sets of each form were mailed by ORI to the city project offices on January 3, 1972 for distribution to the schools where Upswing tutors were working. The teachers and volunteers were to pick up their forms at the schools. The children were to take the forms home to their parents. Completed forms were returned to the schools, where they were collected by project staff for mailing back to ORI. Follow-up questionnaires were sent to the nonresponding teachers (at their respective schools) by ORI on March 13, 1972, with postage-paid, preaddressed envelopes attached for direct return of completed forms to ORI. Follow-up questionnaires were sent by ORI to nonresponding volunteers at their home addresses, as shown on their registration forms, on March 30, 1972.[1]

ORI cannot document the number of questionnaires actually distributed to each response groups in the initial wave, as this task was carried out by the project offices in the cities. Response rates for volunteers and teachers were computed based on the number of each group known to have received a questionnaire (that is, the number who returned a questionnaire after the initial distribution, plus the number who were sent a follow-up form by ORI, provided that the follow-up letter was not returned marked "addressee unknown").

---

[1] The ORI follow-up was not originally planned. The city project staffs were to attempt to get nonresponding teachers and volunteers to complete questionnaires. Their efforts were delayed by semester breaks at the universities where the project offices are located. When it became evident that the response rates were not going to reach acceptable limits, ORI conducted a second follow-up by mail, in March, which yielded adequate data from teachers and volunteers. (ORI was requested not to follow up on parent nonresponse because the directors feared the parents would be intimidated.)

VOLUNTEERS' FIRST IMPRESSIONS OF PROJECT UPSWING

Parameters of the Population

The data presented here are based on the responses of the 261 volunteers who returned first impressions questionnaires by the cutoff date of May 1, 1972. This number is 77% of those known to have received the form (341 people.)[2] The response rates by city (based on the number of known recipients in each city) are as follows: Denver, 69%; Oxford, 80%; St. Louis, 91%; San Francisco 74%. The rate of return from St. Louis was significantly higher than from the other cities. It is possible that this higher rate accounts for variation of response between the St. Louis and other locations. At least, it is impossible to judge how the respondents from other cities would have replied had they returned their questionnaires.

The above response rates (total and by city) are "worst-case" rates. Some volunteers who did not return questionnaires may have failed to do so because they attrited so early that they could not give valid first impressions. This is not only possible, but likely. ORI has found that the city project staffs did not necessarily know about attritees (the St. Louis staff was an exception here). Some volunteers who registered never showed up at the schools, and others came only a few times. From ORI's field visits it appears that volunteers often did not inform Upswing of their decision to leave the project. Since the attrition data were incomplete, such people were sent follow-up questionnaires. They cannot fairly be counted as nonrespondents; rather, they should be removed from the first impressions population. ORI does not know how many such cases, if any, there are, and will not know until complete attrition data are received from the projects. In any case, the first impression response rates are not inflated.

---

[2] It will be remembered from Section III that 407 volunteers registered for Upswing. A total of 341 of these people are known to have received the first impressions questionnaire. The difference between these two numbers—66 volunteers—gives an indication of the amount of volunteer attrition from the beginning of the project to May 1, 1972. It probably is not a highly accurate indication, however, since we know that some volunteers who returned forms, as well as some who did not, had attrited.

Volunteer Initial Opinion

The responding volunteers' first impressions of the project were, on the whole, quite favorable. The majority indicated that:

- They believed the experience would benefit most of the children involved.
- They believed that the training or orientation they received was at least adequate.
- They anticipated that the tutoring methods and materials they were using would prove to be effective.
- They indicated that they had little difficulty in establishing good relationships with both children and teachers.
- They indicated that they were satisfied with the amount of guidance being given by teachers.
- They found the task of preparing for tutoring useful and interesting.
- Experience bore out their expectations about how challenging tutoring would prove to be.
- They felt satisfied with their role as Upswing volunteers.

The trained and untrained respondents expressed very similar opinions about all topics covered by the questionnaire except the preparation for tutoring given by Upswing (training and orientation), and the adequacy of the guidance they were receiving from teachers. The untrained tended to be less satisfied with these aspects of their experience as volunteers. Nevertheless, 59% of the untrained found their preparation adequate or excellent, 51% found that they had sufficient or more than enough training to use the methods and materials of tutoring, and 59% were satisfied with the amount of guidance being given to them by teachers.

When the data are analyzed by city, there are some apparent differences in degree of satisfaction in certain areas. For example, the Oxford respondents, compared to those from the other cities, showed more positive feelings about the value of the project to the children, rated their training or orientation more highly, appeared to have more faith in their approaches to tutoring, and appeared to have a higher level of general role satisfaction. On the other hand, they also seem to have preferred more teacher guidance, or to have been receiving less than the respondents in the other cities. Denver vies with Oxford in positive predictions of effects on the children. The Denver and St. Louis respondents tend to have found it easier to establish good relationships with their pupils.

The foregoing might seem to suggest that the Oxford project is strongest in terms of volunteer satisfaction. It is stressed, however, that the responses to all questions were on the positive side in all locations. No judgment on the relative effectiveness, or even on the relative degree of volunteer satisfaction, of the individual city projects should be made at this time.

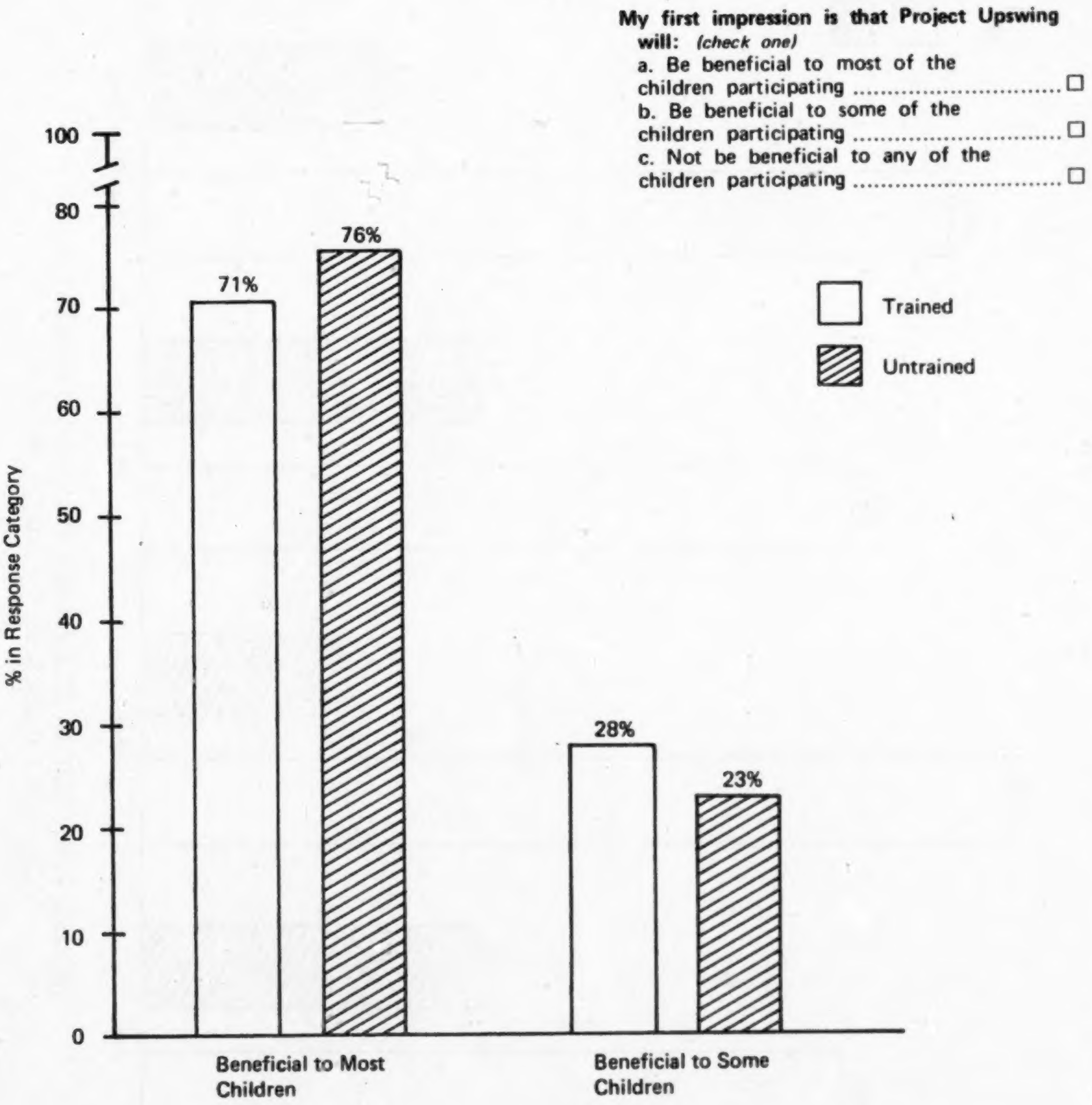
Volunteer Opinions About Project Upswing's Potential Effects on Children

The volunteers demonstrated strong positive feelings about the project's overall worth on the first impressions questionnaire. Seventy-three percent of all respondents said they believed Upswing would benefit most of the children involved, while only one respondent (less than 1%) believed it would benefit none of the children.

The trained and untrained respondents expressed very similar views (Figure 5.1). There is also little difference of opinion between cities, although the Oxford volunteers seem to have had a slightly more positive attitude about the project's potential benefits (Figure 5.2). The most important point to be made about these data is that a substantial majority (67% or more) in all locations said they felt the project would benefit most children.

The volunteers were also asked for an assessment of the probable effects of the Upswing experience on the specific children they tutor. As might be expected, their responses to this question tend to be more to the center than their responses to the question about project impact in general. Thirty-six percent of all respondents anticipated major improvement in the progress of their pupils, a sizable group; but the majority (59%) predicted limited improvement. Four percent felt that the experience would have no effect on their pupils' progress. (There was a fourth answer option—"Project Upswing probably will interfere with the progress normally made by my pupil." However, none of the respondents chose this answer.)

The trained and untrained groups were very similar in their expectations about specific child progress, as shown in Figure 5.3. Comparing the volunteers by city, however, there are differences. In Figure 5.4, Denver and Oxford respondents are well-matched, and have significantly higher expectations than the equally well-matched St. Louis and San Francisco respondents. It should be kept in mind that interpretations of the terms "limited" and "major" of course vary with the individual. What would be viewed as limited improvement by one might be viewed as major improvement by another. Nevertheless, such differences would be expected to affect the responses in all cities equally.



My first impression is that Project Upswing will: *(check one)*

a. Be beneficial to most of the children participating .... ☐

b. Be beneficial to some of the children participating .... ☐

c. Not be beneficial to any of the children participating .... ☐

FIGURE 5.1. TRAINED AND UNTRAINED VOLUNTEERS' OPINIONS ABOUT UPSWING'S POTENTIAL TO HELP CHILDREN, ALL CITIES

(One untrained (1%) felt the project would benefit no children. Nonresponse to question: 1% trained.)

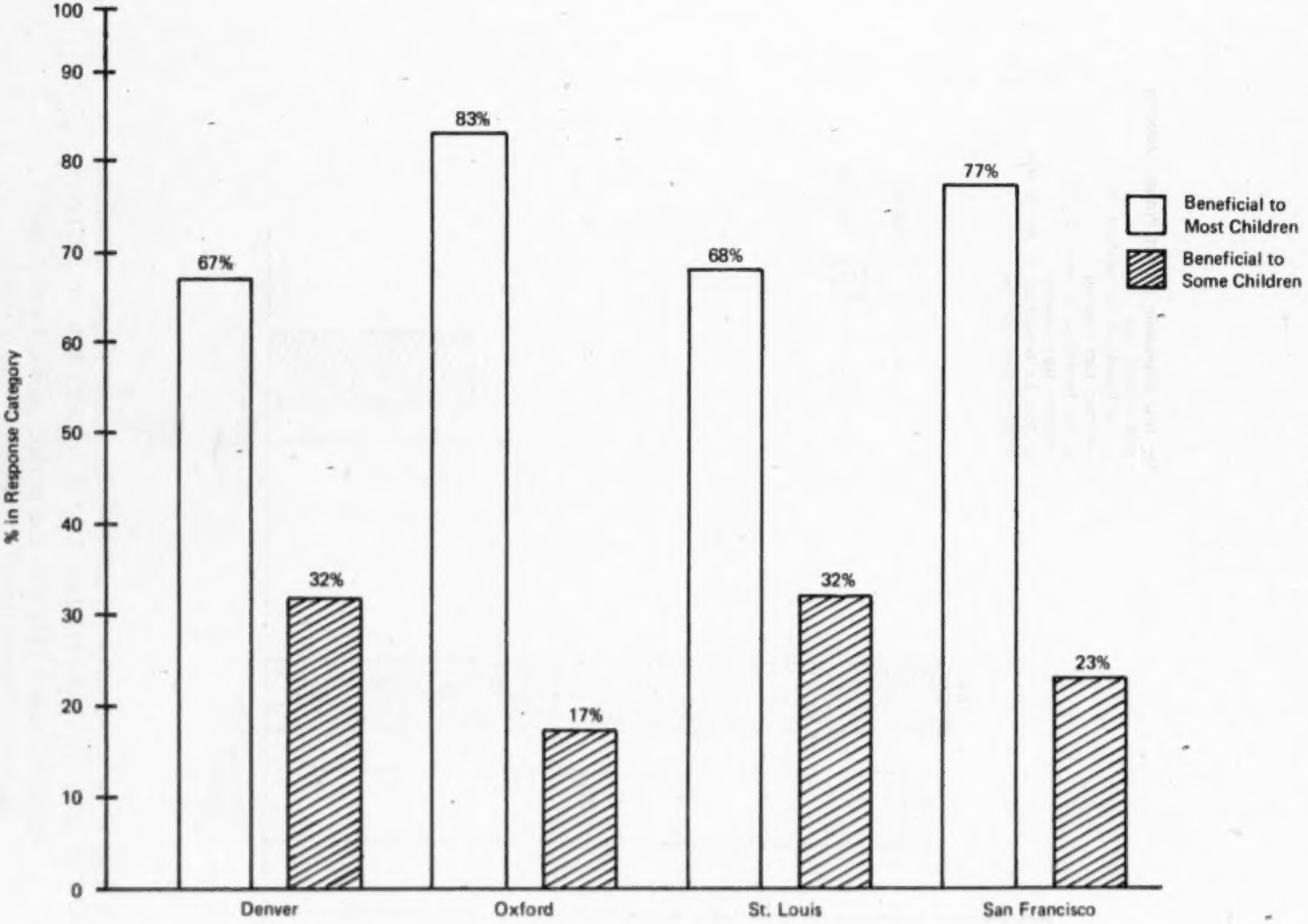
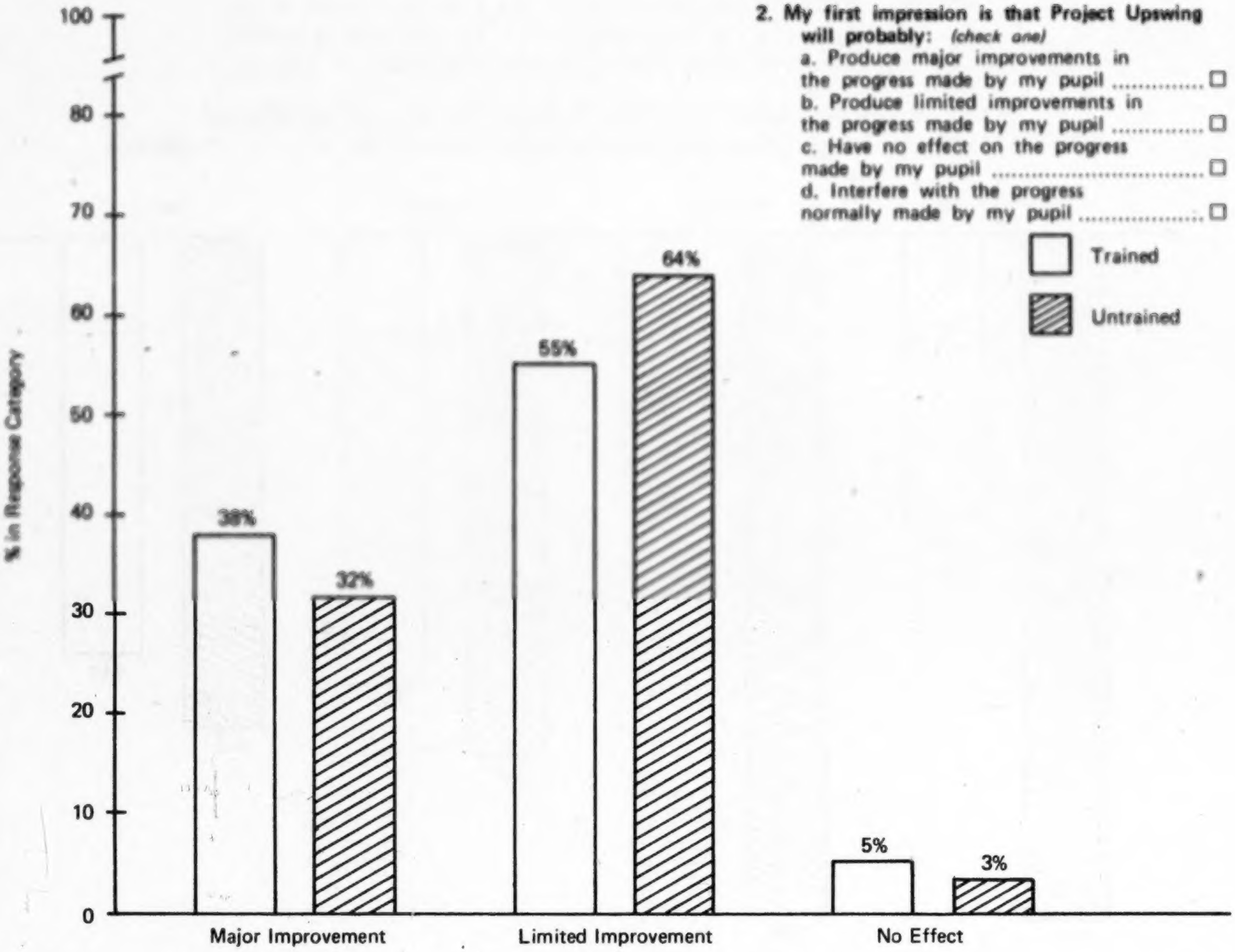


FIGURE 5.2. VOLUNTEER OPINION ABOUT UPSWING'S POTENTIAL TO HELP CHILDREN, BY CITY

(1% of the Denver population—one volunteer—felt the project would benefit no children. Nonresponse to question: San Francisco 1%.)



2. My first impression is that Project Upswing will probably: *(check one)*
a. Produce major improvements in the progress made by my pupil .... ☐
b. Produce limited improvements in the progress made by my pupil .... ☐
c. Have no effect on the progress made by my pupil .... ☐
d. Interfere with the progress normally made by my pupil .... ☐

FIGURE 5.3. TRAINED AND UNTRAINED VOLUNTEERS' OPINIONS ABOUT UPSWING'S PROBABLE EFFECT ON PROGRESS OF THE SPECIFIC CHILDREN THEY TUTOR, ALL CITIES

(Nonresponse to question: 2% trained, 1% untrained; total 1%.)

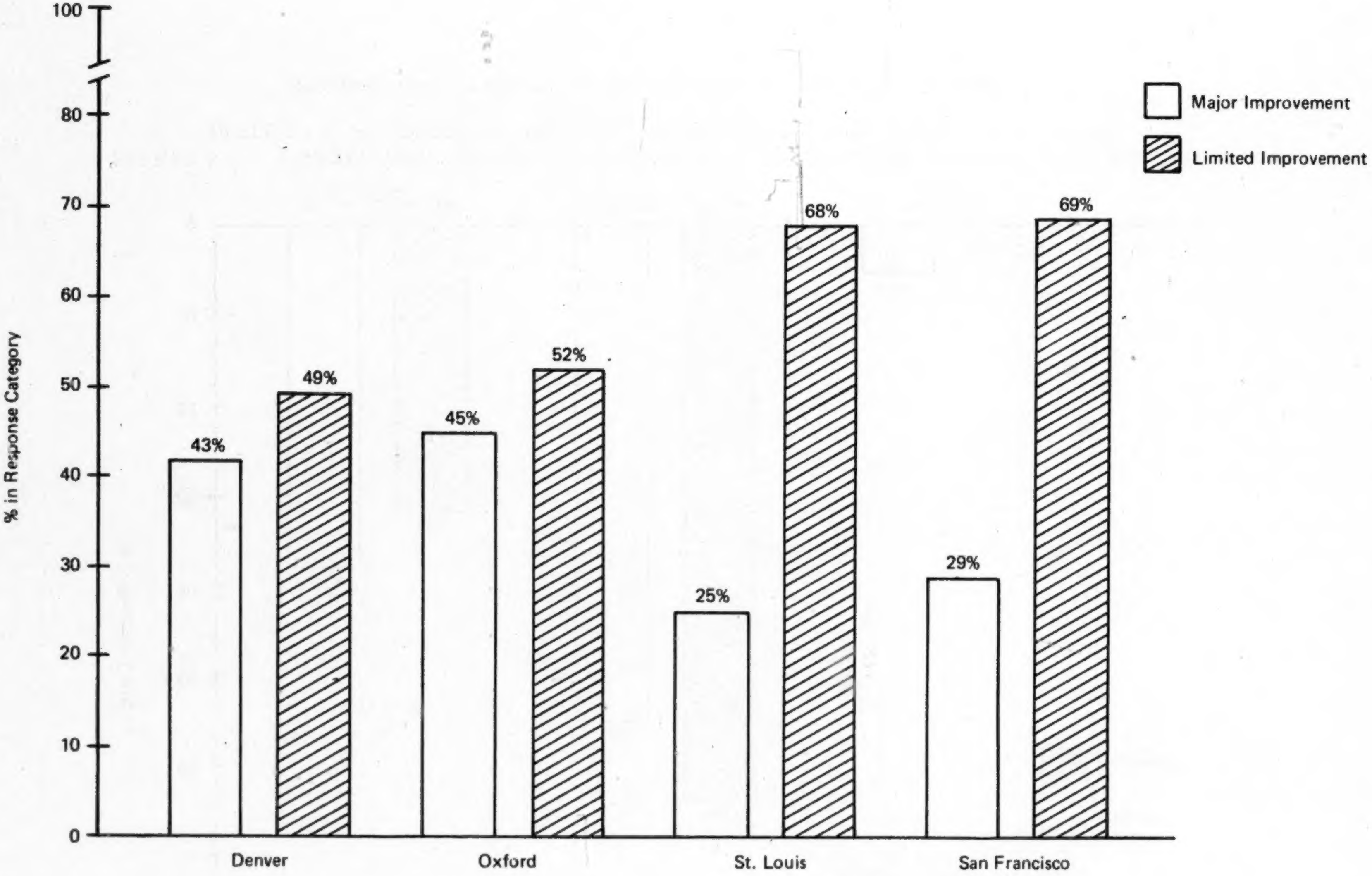


FIGURE 5.4. VOLUNTEER OPINION ABOUT UPSWING'S PROBABLE EFFECT ON PROGRESS OF THE SPECIFIC CHILDREN THEY TUTOR, BY CITY

("No Effect" response category excluded; accounts for 5% of Denver respondents, 3% of Oxford's, 6% of St. Louis's and 0% of San Francisco's. Nonresponse to question: Denver 3%, Oxford and St. Louis 0%, San Francisco 2%; total 1%.)

Thus the attempt here is not to quantify improvement expected by the volunteers, but rather to detect the general quality (positive or negative) of opinions.

Volunteer Comments About Project's Potential Effects on Children

> "It is my feeling that children who get extra help and attention benefit."
>
> "It is my hope that Project Upswing will prove itself to teachers, principals, parents, etc., so that volunteers can play a role in the education of children."
>
> "Since I am in untrained group, I don't feel the progress due to my help will be anything exceptional."
>
> "Improvements in stimulating the child's interest in school have been a possible result of Upswing."
>
> "It would seem to me to be hard to measure whether it's the volunteer, the teacher, or simply maturation which makes the difference."
>
> "I believe that the one-to-one relationship is very beneficial—possibly more in attitude toward self and learning than in actual learning gain."
>
> "I can't help but feel that these children will suffer because of the time lost in classroom teaching while they are with us."
>
> "Because the tutors are basically untrained, I can't see any giant steps forward being made."
>
> "Any personal contact with a qualified adult volunteer can only be a 'plus factor.'"
>
> "Ideally, education is individualized instruction, and that's what Upswing is all about."

Volunteer Opinions About Training or Orientation

Approximately 50% of both the trained and the untrained volunteers who returned first impressions questionnaires indicated they felt the preparation for tutoring (training or, for the untrained, orientation) given to them was "adequate" (Figure 5.5). However, more than twice as great a percentage of trained volunteers felt that their preparation was "excellent." This suggests a tendency for the trained respondents to have a somewhat higher opinion of the preparation given to them, a tendency that is supported by the percentages of trained and untrained who felt their preparation was inadequate (15% of the trained checked "inadequate," versus 26% of the untrained). Moreover, "adequate" is a catchall term that probably represents a broad range of feelings from mostly positive to mostly negative. "Excellent" and "inadequate" are more decisive terms that are indicative of a strong opinion. This premise was substantiated by an analysis of spontaneous comments that qualified many of the "adequate" responses.

The differential rates of nonresponse to the question also are noteworthy. Fourteen percent of the untrained did not answer the question, whereas only 1% of the trained did not answer. The most likely interpretations of the high nonresponse for untrained volunteers are: (a) a sizable group of them felt the question was inapplicable, or (b) a sizable group did not attend the orientation meeting for untrained volunteers.

There is also variation in the volunteers' attitudes toward training/orientation in the different cities. Table 5.1 shows that the Oxford respondents clearly tend to value the training/orientation more highly than the respondents in any other city. The St. Louis respondents have the most negative opinion of the training/orientation. Although 52% thought their preparation was adequate, more than twice as great a percentage felt it was inadequate as felt it was excellent. In all other cities the "excellent" responses outweigh the "inadequates" (and by a very large margin in Oxford, as noted above). The rates of nonresponse to the question are comparable for all cities.

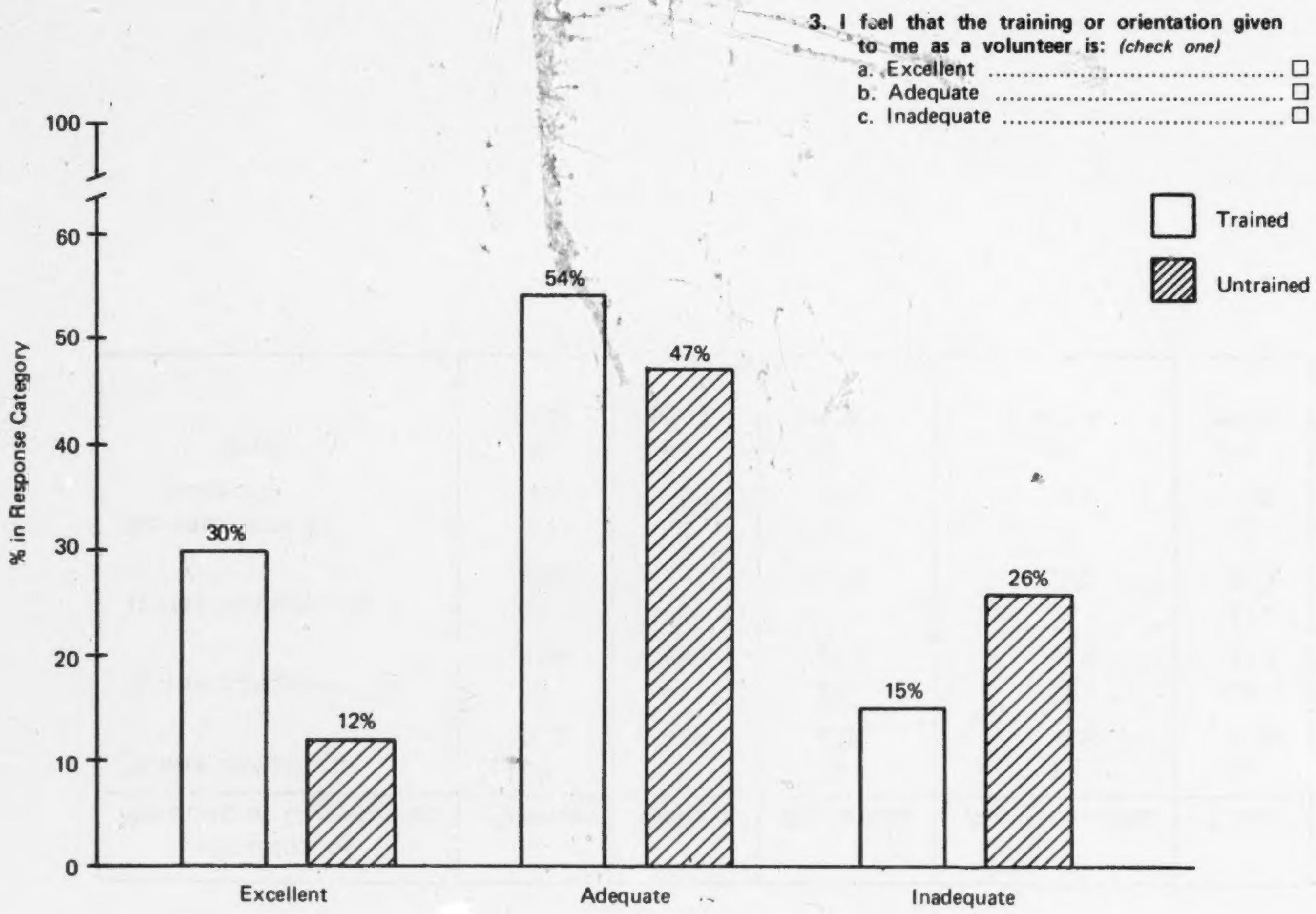

3. I feel that the training or orientation given to me as a volunteer is: *(check one)*
a. Excellent .... ☐
b. Adequate .... ☐
c. Inadequate .... ☐

FIGURE 5.5. TRAINED AND UNTRAINED VOLUNTEERS' OPINIONS OF UPSWING TRAINING AND ORIENTATION, ALL CITIES

(Nonresponse to question: 1% trained, 14% untrained.)

TABLE 5.1

VOLUNTEER OPINION ABOUT EFFECTIVENESS OF TRAINING AND ORIENTATION, BY CITY

Opinion of Training or Orientation	Denver	Oxford	St. Louis	San Francisco	Total
It was excellent	18 33%	20 31%	8 11%	13 25%	59 23%
It was adequate	33 44%	38 59%	37 52%	26 51%	134 51%
It was inadequate	19 25%	3 5%	20 28%	9 18%	51 20%
No response to question	5 7%	3 5%	6 9%	3 6%	17 6%
Total	75 100%	64 100%	71 100%	51 100%	261 100%

A similar but more specific question was asked as a check on the volunteers' general feelings about training and orientation. Again, a difference between the opinions of trained and untrained respondents is evident (Figure 5.6). About 60% of the trained said they had more than enough or adequate training to use the methods and materials of tutoring, whereas about half of the untrained answered the same way. The percentages of trained and untrained respondents who said they had more than enough preparation are both very small, although the percentage of trained who answered in this way is more than twice as great (5% versus 2% of the untrained). The tendency for untrained to feel less well prepared is increased by the 45% of untrained volunteers who answered that they needed more training, versus 34% of the trained.

In Table 5.2, we see again that the Oxford respondents tend to show greater satisfaction with their preparation for tutoring. Thus, based on the two sets of responses (Tables 5.1 and 5.2), it might be that training and orientation were more effective in Oxford than in the other cities. Other factors, however, may be involved. It is known that there has been much more interaction between the Upswing director, staff, and the volunteers in Oxford than in the other cities. Fast, personal problem-solving may have entered into the Oxford volunteers' opinions about their training and orientation. This will be explored more thoroughly in Volume II of the report (Section II).

Table 5.2 shows that the respondents from the other three cities expressed comparable opinions about their preparation to use the methods and materials of tutoring. In all three cases there is a fairly even division between the percentage who felt adequately prepared and the percentage who felt they needed more training, although the "adequate" category is larger due to its broad interpretation by respondents. There is some difference between the distribution of St. Louis responses in Tables 5.1 and 5.2. The first table indicates that the St. Louis respondents may have tended to be less satisfied with their preparation for tutoring than the respondents in all other cities. However, there is no indication in Table 5.2 that they are any less satisfied with

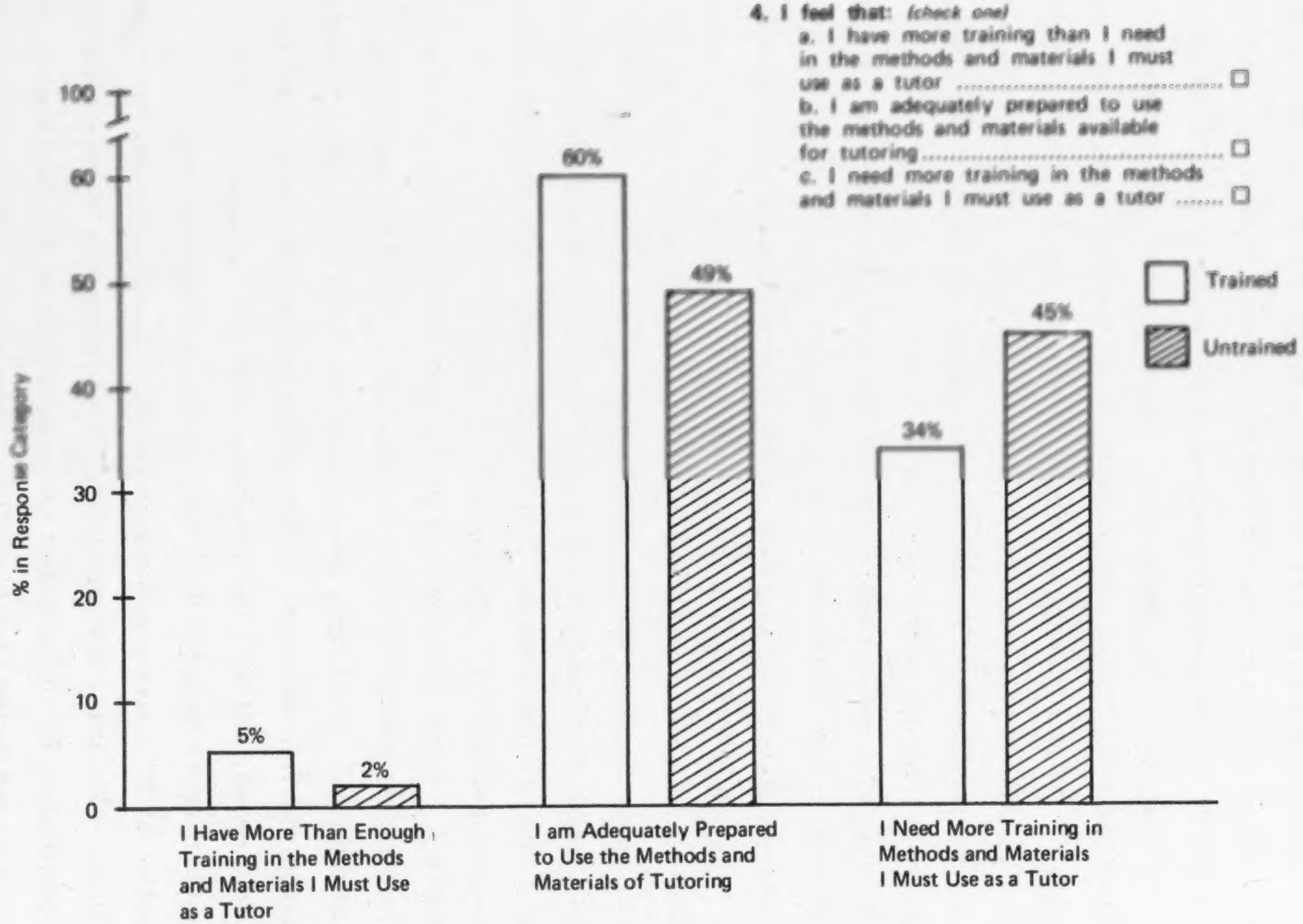


FIGURE 5.6. TRAINED AND UNTRAINED VOLUNTEERS' OPINIONS ABOUT HOW WELL THEY WERE PREPARED TO USE THE METHODS AND MATERIALS OF TUTORING, ALL CITIES

(Nonresponse to question: 1% trained, 4% untrained.)

TABLE 5.2

VOLUNTEERS' OPINIONS ABOUT HOW ADEQUATELY THEY WERE PREPARED TO USE TUTORING METHODS AND MATERIALS, BY CITY

Opinion of Adequacy of Preparation To Use Method and Materials	Denver	Oxford	St. Louis	San Francisco	Total
More than enough preparation	5 7%	1 1%	2 3%	2 4%	10 4%
Adequate preparation	37 49%	44 69%	38 54%	25 49%	144 55%
Need more training in methods and materials of tutoring	31 41%	17 27%	30 42%	23 45%	101 39%
No response to question	2 3%	2 3%	1 1%	1 2%	6 2%
Total	75 100%	64 100%	71 100%	51 100%	261 100%

their preparation for using tutoring materials and techniques than the Denver or San Francisco respondents.

Volunteer Comments About Training or Orientation

"I was not trained at all. I feel I definitely need training and suggestions to do a better job."

"Too general."

"Training program perhaps too concentrated."

"Excellent in giving general approach and philosophy and some specific suggestions."

"I think there should be more demonstration and more participation by the volunteers and less highly concentrated lecturing."

"The training was too lengthy and too complicated."

"I felt much more able and capable to do the tutoring after having training."

"I felt we should have had more training in just communicating with the child and getting him interested."

"If I had not taught before or taught my own children, I'm not sure it [training] would have been [adequate]."

"No general training program can really prepare the volunteer for the very specific unique problems of each child."

"It is giving me a feeling of assurance that I would otherwise have lacked."

"Outstanding orientation."

"At first I thought training was inadequate, but now I realize it gave me a good background and resources with which to work and pursue more knowledge."

"I benefited from being in the trained group as I had never tutored before."

"I am in the untrained group and I certainly feel the lack of training. The orientation sessions were excellent."

"Training given was very good; but I often feel inadequate when I think that someone with much more training and experience could put those 2 short hours a week to much better use for the child than me."

Volunteer Opinions About Probable Effectiveness of Tutoring Methods and Materials

From the data presented in Figure 5.7, there is no difference in the trained and untrained respondents' first impressions about the probable effectiveness of the methods and materials they use in tutoring. The vast majority of both groups felt their methods and materials would prove effective.

The first questionnaire did not ask what actually was being used and to what extent; that information was requested for the entire tutoring period in the final questionnaire. Therefore the trained volunteers' responses, summarized in Figure 5.7, should not be taken as an endorsement of DISTAR and/or Peabody—the reading instruction packages provided for the trained group by Upswing. ORI found during the recent interviews with a sample of the volunteers that many of the trained may have made little use of DISTAR or Peabody.

Table 5.3 shows that a strong majority (94%) of respondents in all cities thought the tutoring materials and methods they were using would be effective. However, the Oxford people again register more positive opinions than the respondents in the other cities. The Denver, St. Louis, and San Francisco people expressed comparable views.

Volunteer Comments About Probable Effectiveness of Tutoring Methods and Materials

"The more I go into the field, the more I realize my lack of specific skills and knowledge."

"I would like to know the relationship of the methods to one another to achieve the final goal."

"I find myself groping to locate specific problems and solutions more than seems desirable."

"I feel that there is more need to know how to use the materials provided."

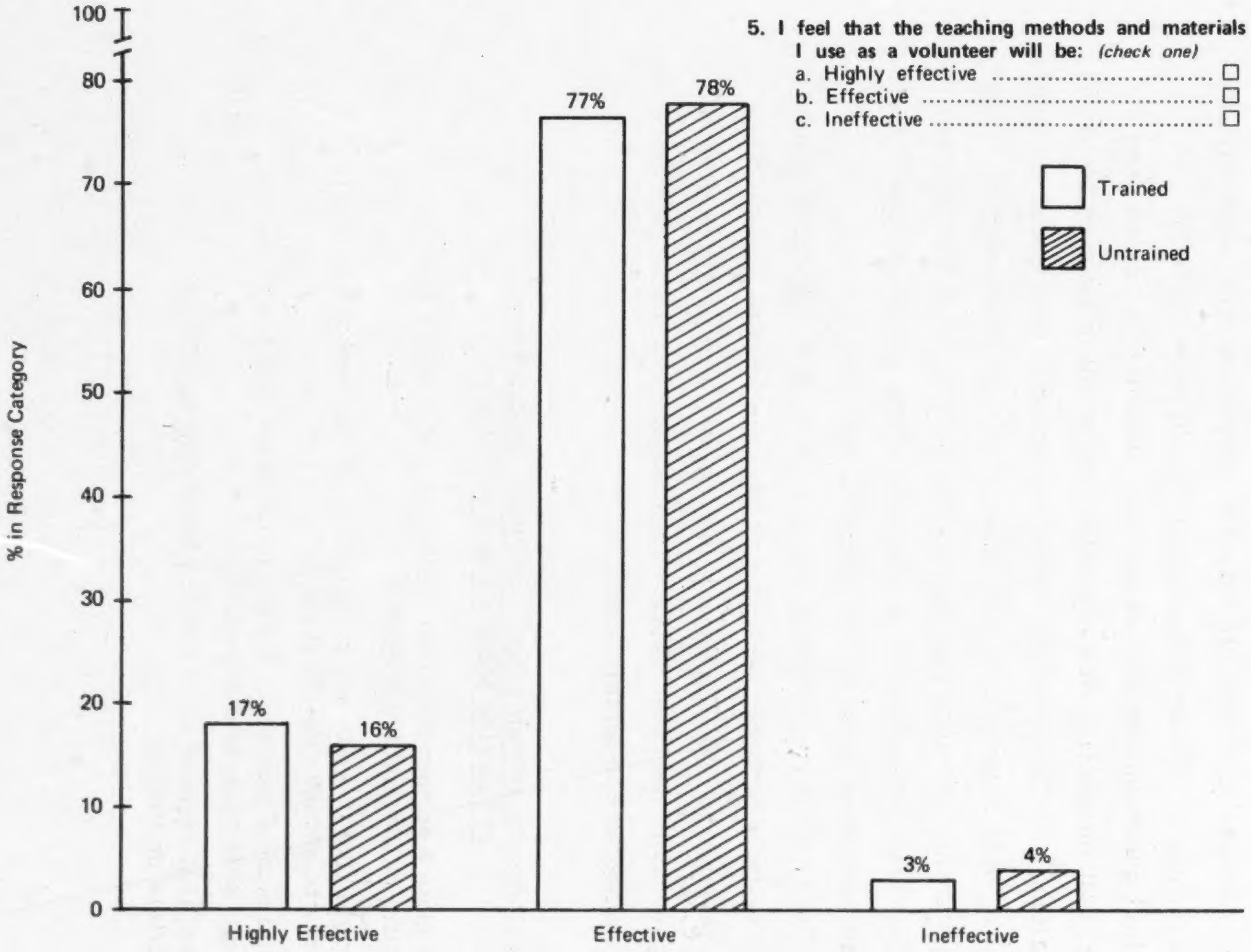


FIGURE 5.7. TRAINED AND UNTRAINED VOLUNTEERS' OPINIONS ABOUT THE PROBABLE EFFECTIVENESS OF THE TUTORING METHODS AND MATERIALS THEY USE, ALL CITIES

(Nonresponse to question: 3% trained, 3% untrained.)

TABLE 5.3

VOLUNTEERS' OPINIONS ABOUT PROBABLE EFFECTIVENESS OF TUTORING METHODS AND MATERIALS THEY USE, BY CITY

Opinion About Effectiveness of Methods and Materials	Denver	Oxford	St. Louis	San Francisco	Total
Will be highly effective	11 15%	17 26%	10 14%	5 10%	43 17%
Will be effective	60 80%	44 69%	55 78%	43 84%	202 77%
Will be ineffective	3 4%	3 5%	3 4%	0 0%	9 3%
No response to question	1 1%	0 0%	3 4%	3 6%	7 3%
Total	75 100%	64 100%	71 100%	51 100%	261 100%

Volunteer-Pupil Relationship

There is no significant difference between the trained and untrained respondents' perceptions of their pupils' first responses to them. The percentages of trained and untrained in each response category in Figure 5.8 are very similar. About 50% of both groups found their pupils quite cooperative from the start of tutoring, while approximately one-third of both groups noted some hesitancy, but still found the children cooperative. From these data it would appear that the Upswing volunteers had little difficulty establishing good relationships with their pupils. However, during interviews with children and their tutors, ORI discovered that a small percentage of volunteers had an inaccurate perception of the children's opinions of them. Although in some cases the volunteer thought the child had a lower opinion than actual, the majority of misperceptions were that the child was more positive than actual.

Thus, in ORI's judgment, the willing cooperation and hesitant cooperation categories would in reality be almost equal at about 43%. This is still a remarkable finding, which, by itself, is an optimistic sign for Project Upswing's effectiveness.

Table 5.4 indicates that the Denver and St. Louis volunteers may have found it somewhat easier to establish good relationships with their pupils. Comparing the percentages in the first two answer categories, the percentage who encountered "willing cooperation" is twice as great for Denver and three times as great for St. Louis as the percentage who encountered "hesitant cooperation." The percentages answering in these categories are less different for Oxford and for San Francisco. However, the difference between willing and hesitant cooperation is not considered very important, particularly at the start of the tutoring relationship. The most important point to be made from the data is that more than three-fourths of the respondents in all cities found the children cooperative from the start. Again it appears that, in general, the Upswing volunteers had little difficulty establishing comfortable relationships with the pupils they tutor.

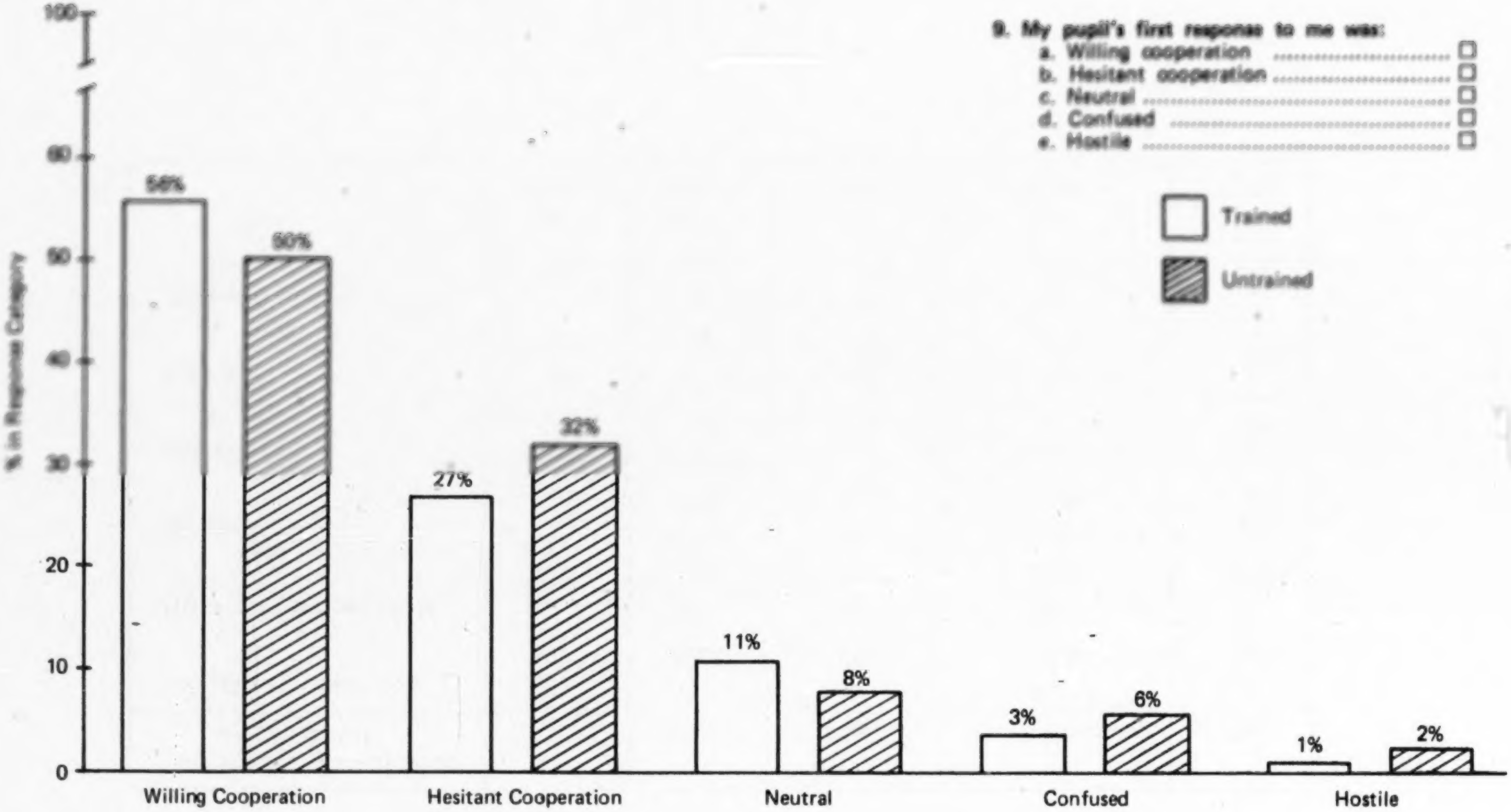


FIGURE 5.8. TRAINED AND UNTRAINED VOLUNTEERS' PERCEPTIONS OF PUPILS' FIRST RESPONSES TO THEM, ALL CITIES

(Nonresponse to question: 2% trained, 2% untrained.)

TABLE 5.4

VOLUNTEERS' PERCEPTIONS OF PUPILS' FIRST RESPONSES TO THEM, BY CITY

Pupil's First Response to Volunteer	Denver	Oxford	St. Louis	San Francisco	Total
Willing cooperation	45 60%	31 48%	42 59%	23 45%	141 54%
Hesitant cooperation	19 25%	20 31%	14 20%	22 43%	75 29%
Neutral	7 9%	7 11%	9 13%	2 4%	25 10%
Confused	2 3%	3 5%	3 4%	3 6%	11 4%
Hostile	2 3%	1 2%	1 1%	0 0%	4 1%
No response to question	0 0%	2 3%	2 3%	1 2%	5 2%
Total	75 100%	64 100%	71 100%	51 100%	261 100%

Volunteer Comments About Their Relationships With the Children They Tutor

"I have doubts as to whether I am helping him or merely increasing his negative feelings [about school]."

"My child is eager and ready to work and makes me feel as though he really needs me."

"I learn as much from the child as he does from me."

"Both children are courteous and disciplined. Did not take long to establish a good relationship."

"She was very affectionate and touched me before we were even introduced."

"My pupil soon overcame a tendency to being shy, and is now very responsive."

"He was on the defensive and rather apprehensive. We are long over that hurdle."

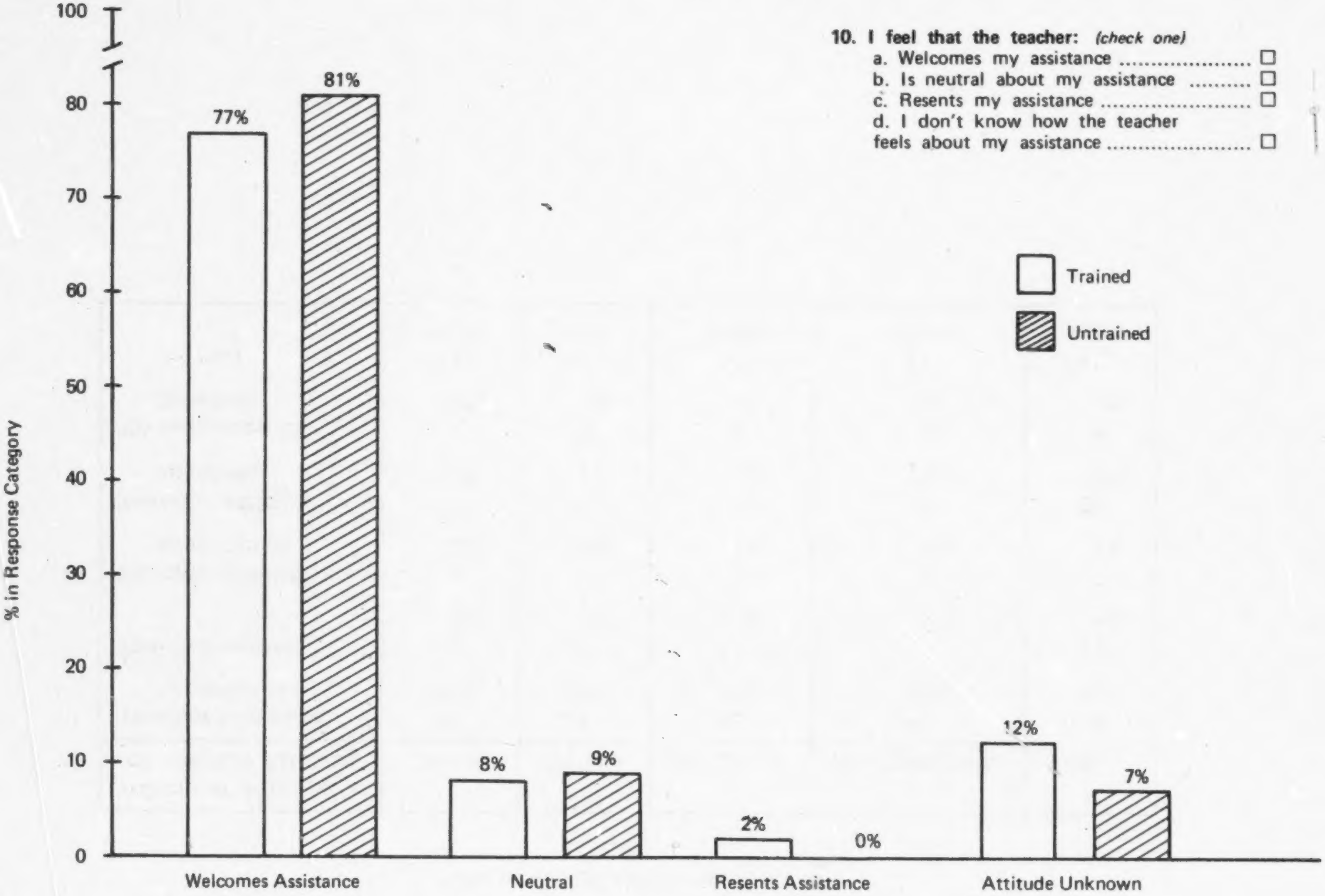
"We share a mutual liking for each other."

Volunteer-Teacher Relationship

The volunteers were asked how they would assess the teachers' feelings about their tutoring assistance. The overwhelming majority of both the trained and untrained respondents checked "I feel that the teacher welcomes my assistance" (77% and 81%, respectively). The data presented in Figure 5.9 indicate that volunteer training made no difference in initial teacher response, at least no difference that the volunteers could detect in the early stages of tutoring.

Table 5.5 permits comparisons by city on the same question. An average of 79% of the responding volunteers in all locations indicated they felt the teachers welcomed them. However, the St. Louis teachers appear to have been somewhat less favorably disposed than the teachers in the other cities. During the interviews in May, ORI found that there had been communications and volunteer attendance problems that seemed to have caused some reservations about the project among the St. Louis teachers. There were similar problems in other cities, but the St. Louis teachers seem to have been more bothered by them, perhaps because of the nature of the school system. ORI observed that the St. Louis schools, compared to those visited in the other cities, seemed to have a more traditional and less relaxed organization, with "closed classrooms," the domain of a single teacher. Interruptions to the daily routine seemed to be more disturbing in this setting. It is stressed, however, that although some difference is evident between St. Louis and the other cities in degree of teacher responsiveness, on the whole the St. Louis volunteers seem to have felt their assistance was well-received. Seventy percent answered "teacher welcomes my assistance," while only 1% (one volunteer) felt that the teacher resented her assistance.

Figure 5.10 gives further indication of generally satisfactory volunteer-teacher relationships (as perceived by the volunteers). A majority of both groups of volunteers indicated they were satisfied with the amount of teacher guidance they were receiving.



10. I feel that the teacher: *(check one)*
a. Welcomes my assistance .... ☐
b. Is neutral about my assistance .... ☐
c. Resents my assistance .... ☐
d. I don't know how the teacher
feels about my assistance .... ☐

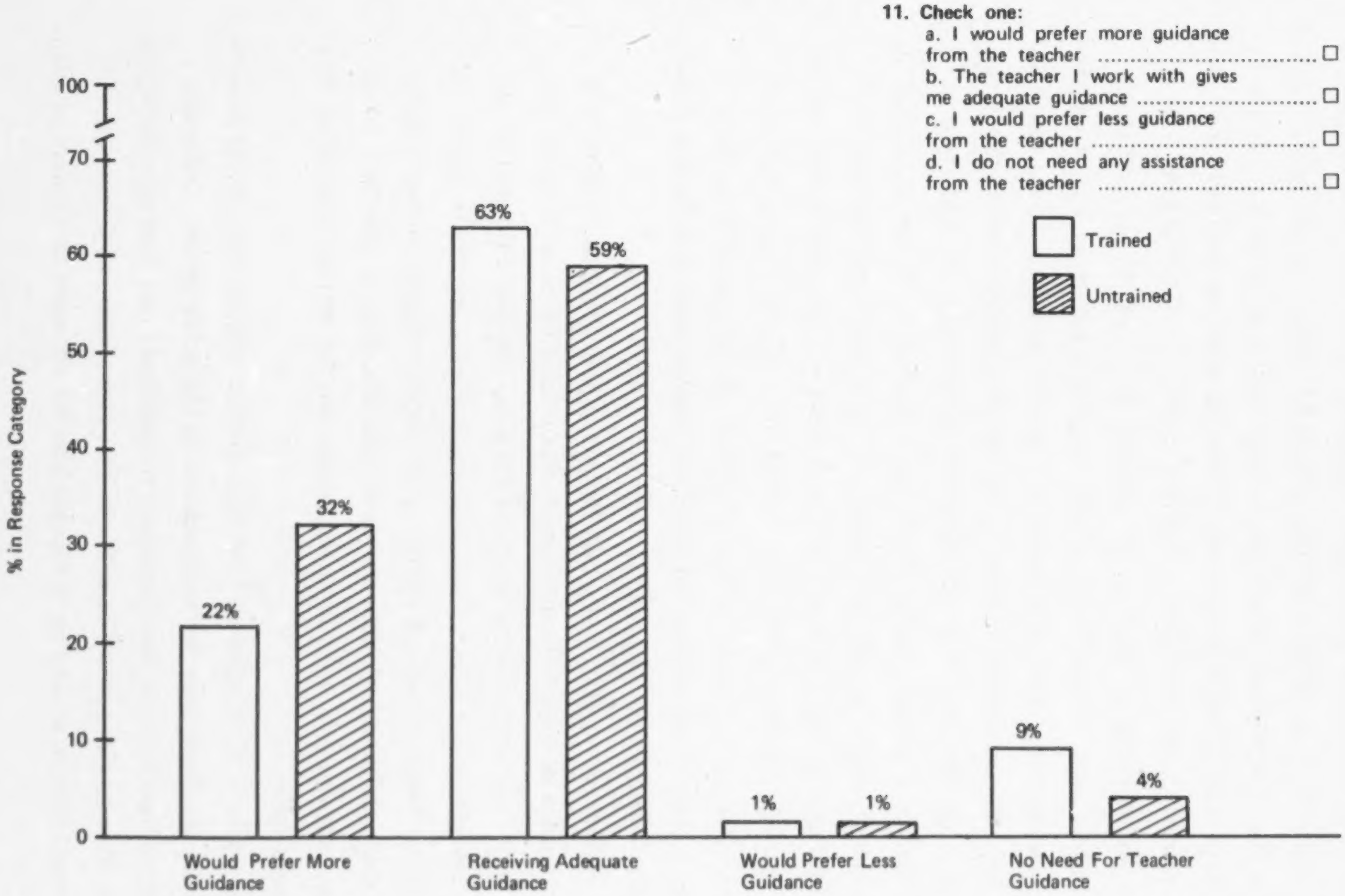
FIGURE 5.9. TRAINED AND UNTRAINED VOLUNTEERS' PERCEPTIONS OF TEACHER ATTITUDE TOWARD THEIR ASSISTANCE, ALL CITIES

(Nonresponse to question: 1% trained, 2% untrained.)

TABLE 5.5

VOLUNTEERS' PERCEPTIONS OF TEACHERS' ATTITUDES TOWARD THEIR ASSISTANCE, BY CITY

Volunteer Perception of Teacher Attitude	Denver	Oxford	St. Louis	San Francisco	Total
Teacher welcomes assistance	64 85%	51 80%	50 70%	41 80%	206 79%
Teacher neutral	2 3%	4 6%	15 21%	1 2%	22 8%
Teacher resents assistance	1 1%	0 0%	1 1%	1 2%	3 1%
Teacher attitude unknown	8 11%	7 11%	3 5%	8 16%	26 10%
No response to question	0 0%	2 3%	2 3%	0 0%	4 2%
Total	75 100%	64 100%	71 100%	51 100%	261 100%


11. **Check one:**

a. I would prefer more guidance from the teacher .... ☐

b. The teacher I work with gives me adequate guidance .... ☐

c. I would prefer less guidance from the teacher .... ☐

d. I do not need any assistance from the teacher .... ☐

FIGURE 5.10. TRAINED AND UNTRAINED VOLUNTEERS' OPINIONS ABOUT ADEQUACY OF GUIDANCE GIVEN THEM BY TEACHERS, ALL CITIES

(Nonresponse to question: 5% trained, 4% untrained.)

There is a significant difference, however, in the attitudes of the two groups. This difference is in the direction expected, based on the project design. It was planned that the trained volunteers would receive no guidance, as such, from the teachers (i.e., although they might consult with the teachers from time to time, the trained people would plan tutoring activities on their own). The untrained, on the other hand, were to be "teacher-directed" to the extent the individual teachers were inclined or had time to give direction (i.e., it was to be a "typical" school volunteer arrangement in which the teacher uses the help as she sees fit). The response choices on the questionnaire obscure the issue somewhat, since all but one ("I do not need any guidance...") imply that at least some guidance was being received by all volunteers. However, based on the May interviews with a sample of volunteers, it appears that perhaps a majority of both trained and untrained have had little substantive contact with the teachers (except possibly in Oxford). Data from the final questionnaires should help to clarify this issue. In any case, it can be assumed that the trained people's apparently greater satisfaction implies that they tended to feel more self-sufficient than the untrained.

The difference in opinion occurs largely in two response categories. A smaller percentage of trained volunteers felt the need for more teacher guidance, and a larger percentage said they did not need teacher guidance at all.

The "would prefer more guidance" category is important in itself. Almost a third of the untrained group expressed a need for more teacher support. Although the percentage of trained who expressed this need is smaller, it too is significant, particularly since it was planned that the trained should be able to work independently.

From Table 5.6, it appears that more Oxford respondents prefer to work closely with the teachers than the respondents in the other cities. Although there is a suggestion that the San Francisco respondents may feel more independent than the others, the difference between San Francisco and Denver or St. Louis is so small that it should be discounted in the absence of supporting data.

TABLE 5.6

VOLUNTEERS' OPINIONS ABOUT ADEQUACY OF GUIDANCE RECEIVED FROM TEACHERS, BY CITY

Opinion About Adequacy of Guidance From Teacher	Denver	Oxford	St. Louis	San Francisco	Total
Would prefer more guidance	16 21%	29 45%	15 21%	8 16%	68 26%
Receiving adequate guidance	48 64%	31 49%	43 61%	38 74%	160 61%
Would prefer less guidance	2 3%	0 0%	0 0%	0 0%	2 1%
No need for teacher guidance	7 9%	0 0%	8 11%	4 8%	19 7%
No response to question	2 3%	4 6%	5 7%	1 2%	12 5%
Total	75 100%	64 100%	71 100%	51 100%	261 100%

One possible explanation for the trend in Oxford is related to the existence or nonexistence of a school volunteer program prior to Upswing. Oxford had none. San Francisco has for years had a well-defined program (the San Francisco Education Auxiliary, or SFEA) that offers rather extensive training. Denver and St. Louis both have had programs for volunteers in the public schools for some time, although according to the information available to ORI, neither is so well established, organized, and integrated with school life as the San Francisco program. The volunteer registration data, however, make this interpretation questionable. Table 3.8, on previous relevant experience, does show Oxford with a smaller percentage of experienced volunteers (considering all types of experience combined), but by only a small margin.

Volunteer Comments About the Volunteer-Teacher Relationship

> "She is cooperative now, at first she was not. She did not know what the program was about."
>
> "I would like to see a little more help given to the teachers from the Project staff so they may better understand the role of the volunteers and how to use them effectively."
>
> "I feel that very close cooperation between teacher and tutor is essential so that they don't work against each other."
>
> "She has been wonderful and has given me so much help in understanding their reading program."
>
> [Teacher welcomes volunteer assistance] "But is a little suspicious, mainly of my qualifications."
>
> "She has been very receptive and helpful, and thinks the individual instruction valuable."

Volunteer Attitudes Toward the Task of Preparing for Tutoring Sessions

The data displayed in Figure 5.11 indicate that almost 100% of both the trained and untrained respondents were putting some effort into preparing for their work as tutors.[3] Only 2% of all respondents (2% of the trained and 3% of the untrained in the figure) said they felt preparing for tutoring was time-consuming and unnecessary. Moreover, the overwhelming majority of both groups said they found the preparatory effort useful and interesting. Clearly, training status made no difference in the respondents' attitudes.

Table 5.7 shows a similar distribution of attitudes by city. Close to 100% of the respondents in Denver, Oxford, and San Francisco, and 88% of those in St. Louis, indicated that they do prepare for sessions held with their pupils.[3] Again the overwhelming majority in all cases said they find the task both useful and interesting. The San Francisco people tend to show more enthusiasm for preparing and the St. Louis people slightly less than those in Denver and Oxford; however, these differences are small. The difference between the "extremes," St. Louis and San Francisco, is fairly considerable. St. Louis's trained volunteers were required to turn in a lesson plan for each tutoring session. It may be that reaction against this requirement is reflected in their somewhat less enthusiastic group response. In any case, it is not considered of major importance in view of the overriding points that a very strong majority of volunteers in all locations apparently prepare for the work and find the preparation rewarding.

---

[3] Based on the combined responses in the first two categories.

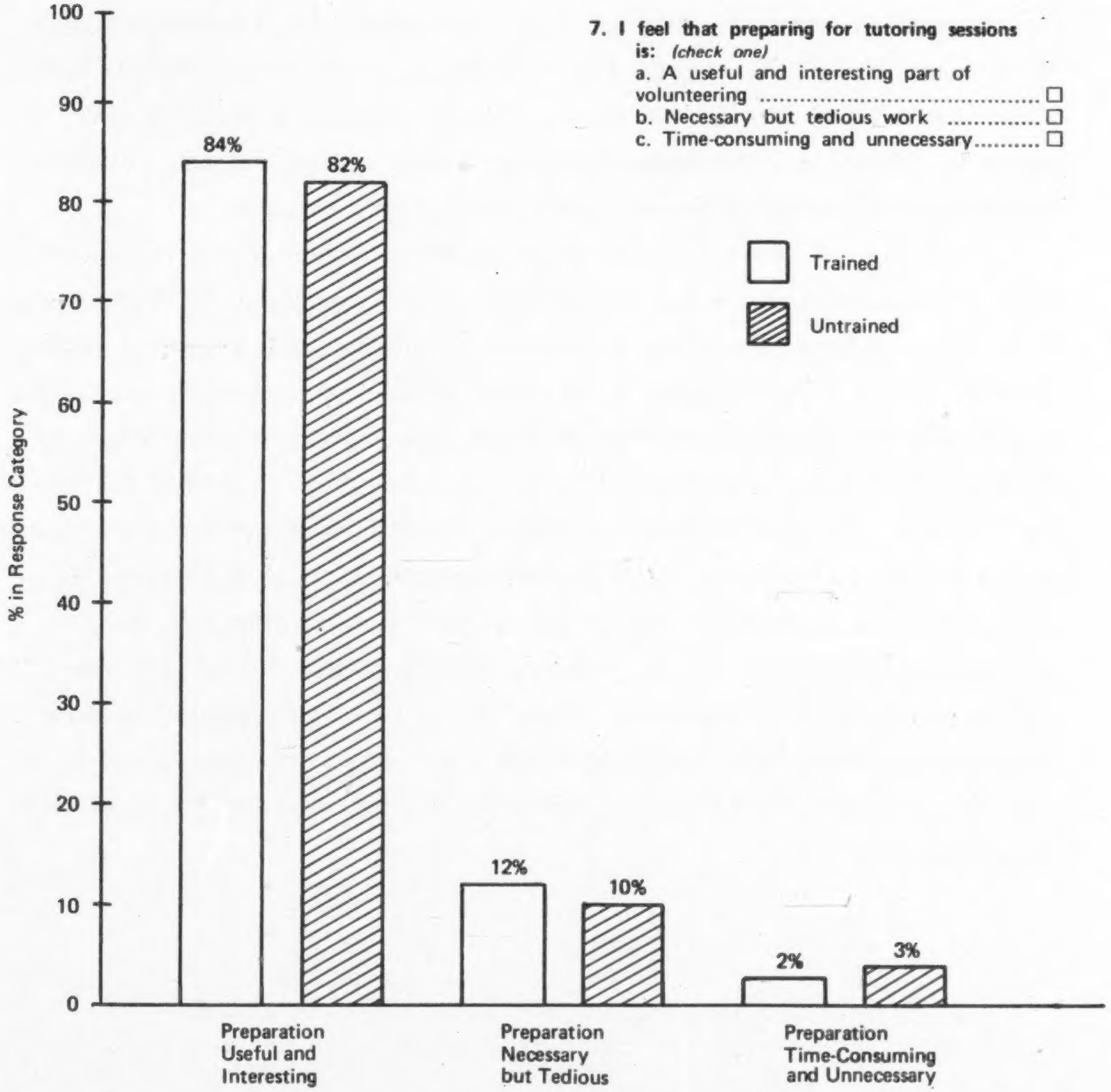


FIGURE 5.11. TRAINED AND UNTRAINED VOLUNTEERS' ATTITUDES TOWARD THE TASK OF PREPARING FOR TUTORING SESSIONS, ALL CITIES

(Nonresponse to question: 2% trained, 5% untrained; total 3%.)

TABLE 5.7

VOLUNTEERS' ATTITUDES TOWARD TASK OF PREPARING FOR TUTORING SESSIONS, BY CITY

Attitude	Denver	Oxford	St. Louis	San Francisco	Total
Preparation useful and interesting	63 84%	54 84%	54 76%	47 92%	218 84%
Preparation necessary but tedious	9 12%	8 12%	9 12%	3 6%	29 11%
Preparation time-consuming and unnecessary	0 0%	1 2%	4 6%	1 2%	6 2%
No response to question	3 4%	1 2%	4 6%	0 0%	8 3%
Total	75 100%	64 100%	71 100%	51 100%	261 100%

Volunteer Comments About Preparing for Tutoring

"It is more time-consuming than I had expected."

"The preparation is as exciting as the tutoring itself."

"I would certainly hesitate using a child's time if I had not prepared to try and give him something."

"I don't mind the preparation I do, but I don't know if it is what should be done or not."

"It is hard to make lesson plans when the reading material to be used is not available for us to take home to study."

"As far as I am concerned preparation is the key to success. I feel that each lesson must be prepared on the basis of the evaluation of the previous lesson."

"I dislike lesson plans intensely, and find that my student's rebelliousness makes them worthless."

"One must be prepared if you wish to be effective."

"Preparation is necessary but lesson plans are not strictly adhered to since my pupil's interest span is short and unpredictable."

Assessment of the Difficulty of Tutoring

Sixty-nine percent of the trained and 58% of the untrained respondents indicated that experience upheld their expectations about the difficulty of tutoring. Equal percentages of untrained, and roughly equal percentages of trained, found tutoring more and less difficult than they had anticipated. There are small differences between the percentages of trained and untrained in all response categories; however, they are not statistically significant. (Figure 5.12.)

Table 5.8 presents the above data by city. Sixty percent or more of the respondents in all locations indicated that they had accurately assessed the difficulty of tutoring. The percentages on either side of the mode response are roughly equal for Denver and Oxford. There is, however, some difference in these percentages for St. Louis and San Francisco. It is not a great difference in either case, but it is interesting that the higher percentage of St. Louis volunteers found tutoring easier than expected while the higher percentage in San Francisco found it more difficult than expected. This switch in weight of opinion makes the difference more noteworthy. It may be that the San Francisco respondents as a group encountered somewhat more difficulty in tutoring than the St. Louis respondents, or training in either city may have given an inaccurate impression of the difficulty of the job. Nevertheless, based on the recent interviews, ORI cannot make accurate interpretation of the respondents' motives without further information. Looking at the data by city, as well as by training status of volunteers, the most important point to be taken is that the overwhelming majority of those people who did not drop out of the project early found tutoring as they had expected it to be or easier.

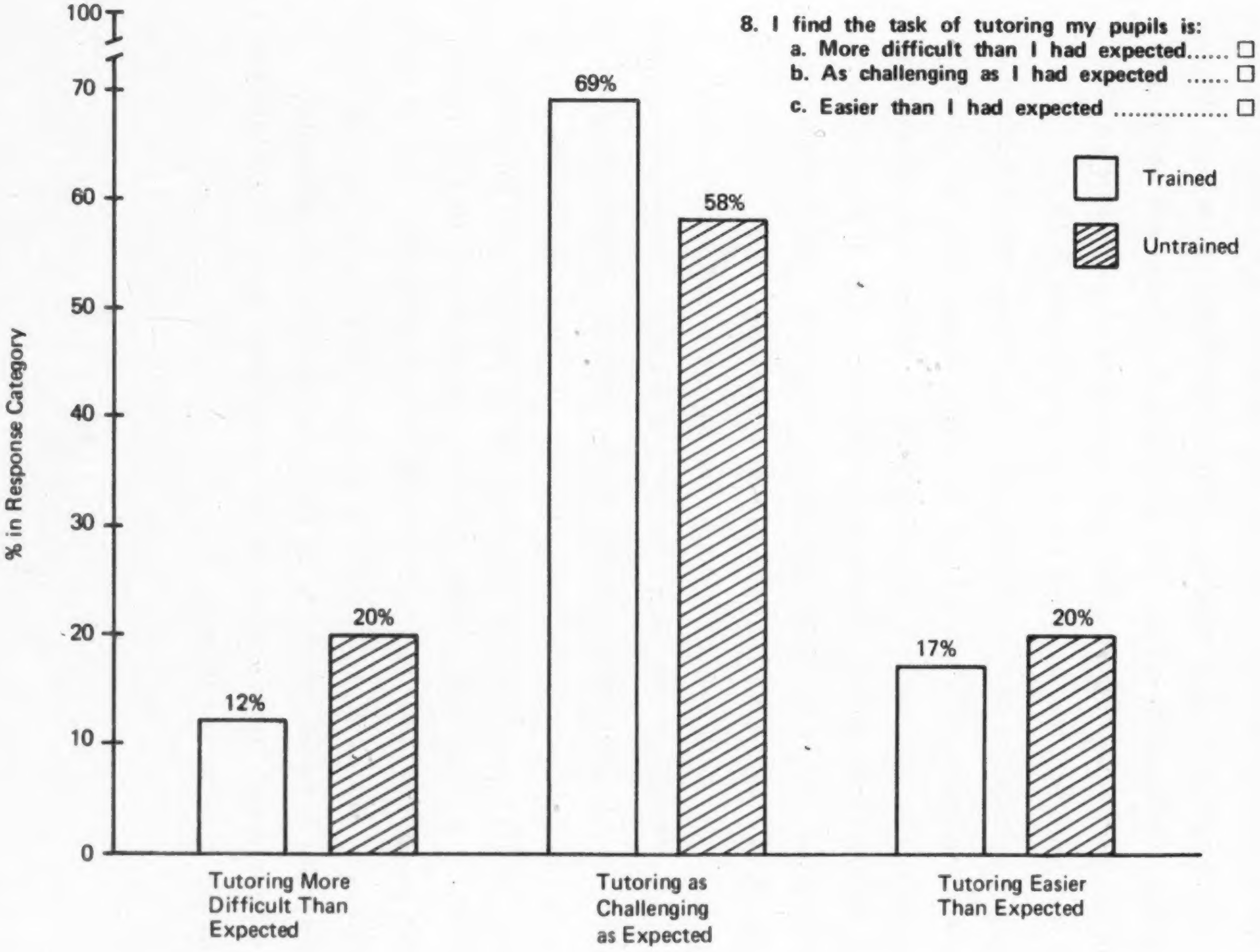


FIGURE 5.12. VOLUNTEERS' ASSESSMENT OF THE DIFFICULTY OF TUTORING, BY TRAINING STATUS, ALL CITIES

(Nonresponse to question: 2% trained, 2% untrained.)

TABLE 5.8

VOLUNTEERS' ASSESSMENT OF THE DIFFICULTY OF TUTORING, BY CITY

Assessment of Difficulty of Tutoring	Denver	Oxford	St. Louis	San Francisco	Total
More difficult than expected	9 12%	10 16%	9 13%	11 21%	39 15%
As challenging as expected	55 73%	39 61%	43 60%	33 65%	170 65%
Easier than expected	11 15%	13 20%	17 24%	6 12%	47 18%
No response to question	0 0%	2 3%	2 3%	1 2%	5 2%
Total	75 100%	64 100%	71 100%	51 100%	261 100%

Volunteer Comments About the Difficulty of Tutoring

"Volunteers for this project should be screened carefully. All are not capable of teaching children regardless of their good intentions. It takes more to produce results."

"Insofar as any training for such a short time can't possibly make a volunteer feel comfortable I am mostly aware of what I don't know."

"Frustrating more than difficult."

"Most interested middle-aged mothers have sufficient insight. Others may need training, depending on background."

"I'm having so much fun I'm afraid it can't be right! (Puritan ethic)"

"The most important thing to remember is HAVE FUN."

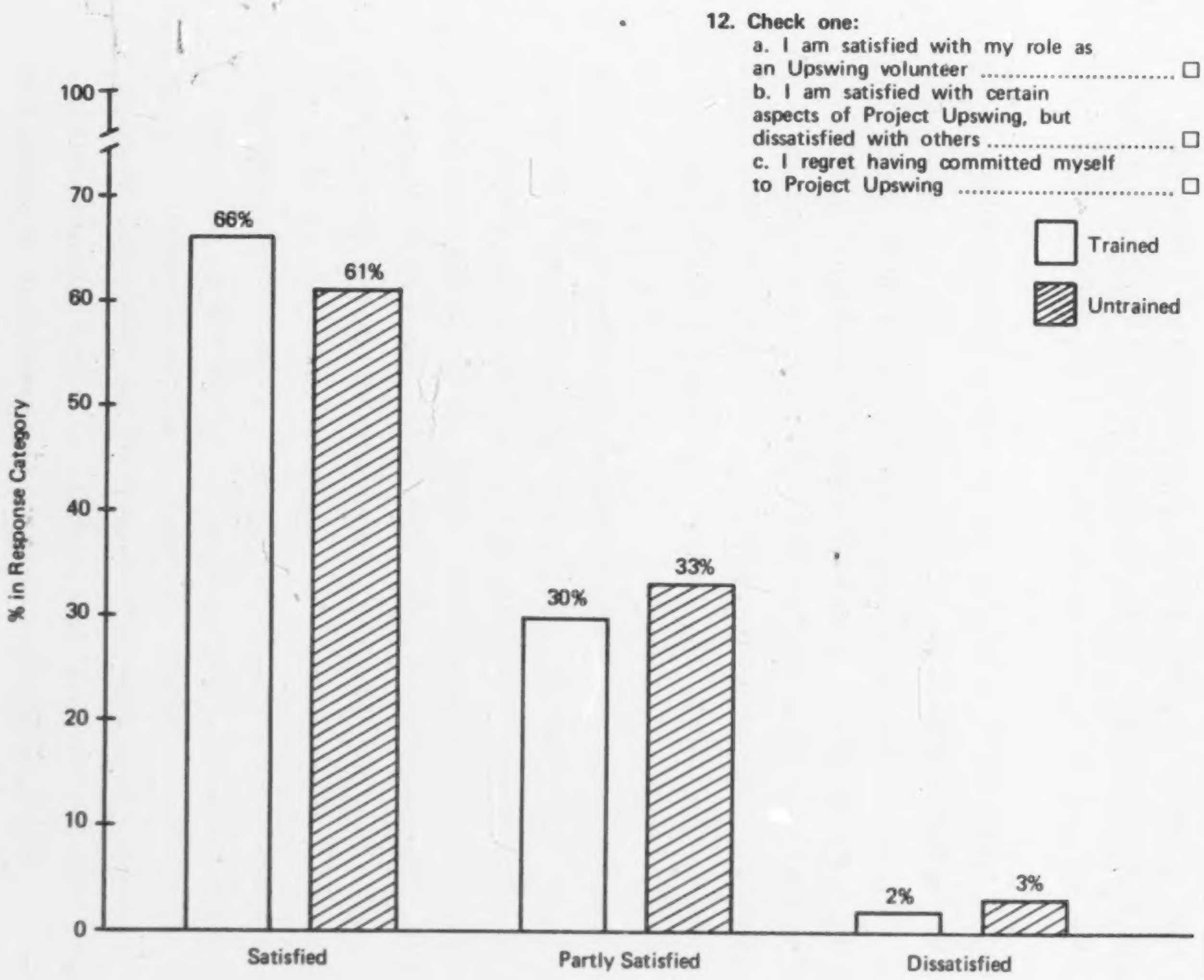
General Satisfaction With Role as Volunteer Tutor

Several of the questions on the first impressions questionnaire were included for their value as indicators of role satisfaction as well as for information on more specific issues (namely, the questions dealing with volunteer-pupil relationship, volunteer-teacher relationship, preparation for tutoring sessions, and the actual difficulty of tutoring in relation to expected difficulty). The idea was that these data would support a general expression of satisfaction, if that were found, or, on the other hand, would suggest reasons for general dissatisfaction. The responses to these questions are strongly positive, as are the responses to the role satisfaction question.

Figure 5.13 shows that the respondents tended to be quite satisfied with their tutoring role. It also shows that training had no bearing on their degree of satisfaction at the time they completed the first impressions questionnaire. Only a negligible percentage of either group indicated they were dissatisfied. Approximately two-thirds of both checked "satisfied," while about another third of both checked "partly satisfied."

Some of the volunteers with mixed feelings commented on their reasons, which were various. One volunteer said she felt they should receive carfare for commuting to and from school. Three people said they had so many other obligations that the commitment to Upswing was more than they could comfortably handle. A fairly common reason was that the volunteer felt uncertain of her ability to help the child. In a few cases, volunteers already felt disappointed in the results of their tutoring efforts. Few comments on the role satisfaction question were explicit complaints about the project. Such comments were made in response to other questions, or in the general comment space, when made.

From Table 5.9, the Oxford respondents indicated a significantly higher level of role satisfaction than those from Denver and San Francisco. There is also a tendency, although somewhat less pronounced, toward greater satisfaction among the St. Louis respondents. It should be remembered, however, that the majority in all cities fall in the highest category of satisfaction, and less than 5% in all cities fall in the "dissatisfied" category.



12. Check one:
a. I am satisfied with my role as an Upswing volunteer .... ☐
b. I am satisfied with certain aspects of Project Upswing, but dissatisfied with others .... ☐
c. I regret having committed myself to Project Upswing .... ☐

FIGURE 5.13. TRAINED AND UNTRAINED VOLUNTEERS' DEGREE OF SATISFACTION WITH THEIR ROLE AS TUTORS, ALL CITIES

(Nonresponse to question: 2% trained, 3% untrained.)

TABLE 5.9

VOLUNTEERS' DEGREE OF SATISFACTION WITH THEIR ROLE AS TUTORS, BY CITY

Degree of Satisfaction With Role	Denver	Oxford	St. Louis	San Francisco	Total
Satisfied	42 56%	47 73%	48 68%	29 57%	166 64%
Partly satisfied	31 41%	13 20%	18 25%	20 39%	82 31%
Dissatisfied	2 3%	1 2%	3 4%	1 2%	7 3%
No response to question	0 0%	3 5%	2 3%	1 2%	6 2%
Total	75 100%	64 100%	71 100%	51 100%	261 100%

Volunteer Comments Related to Role Satisfaction

"I'm having a wonderful, interesting and challenging experience working as an Upswing volunteer."

"Challenging, frustrating and rewarding."

"I feel that it's a rewarding project for me. I'm accomplishing something important."

"I wonder at times just how much I am getting across, and if what I am presenting is what he needs."

"Progress seems slow. I would like to be able to accomplish more."

"I wonder how effective I am in this role and so in this way I feel I am at least helping others determine the effectiveness of volunteer tutors."

"I sometimes feel at a loss as to how to deal with this child."

"I would be more satisfied if I felt more confident in my ability to help James make major progress."

TEACHERS' FIRST IMPRESSIONS OF PROJECT UPSWING

Parameters of the Population

The data presented here represent the first impressions of 90% of the teachers participating in Upswing; 112 out of a total population of 130 teachers returned questionnaires. By city, the response rates are: Denver, 96%; Oxford, 89%; St. Louis, 100%; and San Francisco, 76%. Thus the data on teacher impressions can be considered representative of the total population and of the individual project population in all cities.[4]

Special Considerations About the Data

Please note that many teachers have more than one pupil receiving assistance from an Upswing volunteer (the range was from 1-15 pupils at the time the first impressions questionnaires were completed). In the figures and tables dealing with observations of specific children (Figures 5.15 to 5.17 and Tables 5.11 to 5.13), the totals are totals of children reported on by teachers, not numbers of responding teachers, and the percentages are based on the numbers of children. In these cases N = 242 for the project at a whole.[5]

The data on the children offer only a rough indication of what changes, if any, were observed in their achievement and behavior/attitude toward school. Complete attrition data on volunteers and children were not returned to ORI so that we could accurately determine how many children were involved in the project in January 1972. The total of 242 reported on by teachers in the first impressions questionnaire seems low, at least for that stage of the project. On a by-city basis, the Denver and St. Louis numbers of children are more in line with ORI's expectations than the Oxford and San Francisco numbers.

---

[4] The San Francisco response is considered good, although not so outstanding as the response from the other cities.

[5] The design of Project Upswing called for 100 children to be tutored in each city, 50 by trained volunteers and 50 by untrained volunteers. Not all of these children were assigned a volunteer (only Denver registered its volunteer quota of 100), nor did all volunteers who were assigned continue tutoring until January 1972, when the first impression forms were distributed. Some never even began tutoring. This resulted in teachers not being able to comment on all children who were to have received assistance. Data are available on a total of 242 children rather than a total closer to 400 (allowing for teacher nonresponse)

Teacher Initial Opinion Summary

- The Upswing teachers seem to have positive general attitudes about the project's worth. Close to two-thirds of those responding said they believed Project Upswing would benefit most of the children involved, and 34% said they believed it would benefit some of the children involved.
- With regard to specific project effects, the teachers saw improvement in the reading ability of slightly more than half of the children on whom they reported. They saw less improvement in behavior or attitude toward school—39% of the children were said to have made gains in these areas.
- The teachers indicated that 76% of the children on whom they reported liked their Upswing volunteers and only 1% (three children) disliked their volunteers.
- Close to half of all responding teachers said they knew nothing about the training given to Upswing volunteers. (Many teachers were assigned both trained and untrained volunteers, and this half does not represent only teachers who had untrained.)
- Teacher willingness to work with Upswing volunteers again is indicative of favorable attitudes toward the project. Seventy-one percent said they would like

---

which ideally would have been the case. ORI cannot say at this point whether the 242 were in fact all of the responding teachers' pupils who were receiving assistance from Upswing volunteers at the time or whether the responding teachers failed to report on all of their pupils who were receiving assistance.

Upswing volunteers to tutor their pupils next year. Ten percent said they would not like it, and 18% were undecided at the time.

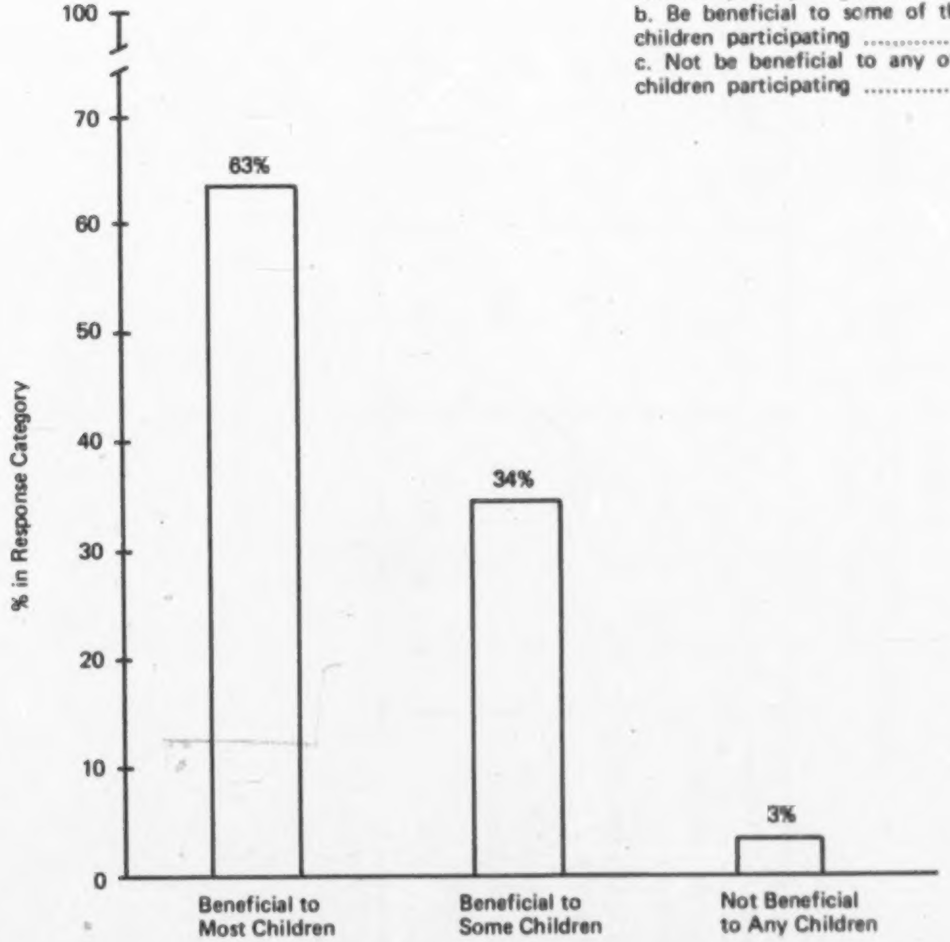
- Teacher impressions generally are similar from city to city. One possibly important difference is that St. Louis and San Francisco teachers were significantly less well-informed about volunteer training than the teachers in Denver and Oxford. Another noteworthy difference is difficult to interpret at this time. The majority of Denver teachers said that they thought Upswing would benefit most children involved and that they would like to have Upswing volunteers work with their pupils next year. However, the Denver views on these points were not as strongly positive as the views in other cities (particularly on the latter point—only slightly over half wanted Upswing volunteers again). On the other hand, Denver teachers observed improvement in the tutored children more often than the teachers in any other city.

Teacher Opinions About Project Upswing's Potential Effects on Children

The teachers, as well as the volunteers, seem generally to have felt that Project Upswing would prove to be worthwhile. Approximately two-thirds of the teachers felt that most children participating in the program would benefit from the extra help, while about a third felt that only some would benefit (Figure 5.14). Table 5.10 shows a similar division of opinion in all of the cities. The percentage who felt the project would not be beneficial to any children is low in all locations and for the total population. Denver teachers appear to have a slightly less favorable view of the project's general value, based on the lower percentage there (58% versus 63%, 68%, and 65% in the other cities) who said Upswing would benefit most children and the higher percentage who said it would benefit no children (7% versus 0%, 4%, and 0% in the other cities).

Teacher Comments About Project's Potential Effects on Children

> "I have watched with great interest the beneficial impact each visit of the volunteer has had upon the pupil involved. I only wish that at least 50% of my class could share in this morale-boosting technique. To favorably alter a child's impression of self is to gain great stride in a learning program."
>
> "I think it can only benefit the children."
>
> "In my own case, I felt the program had great potential—but after a very disappointing experience I tend to question its value." [Volunteer came irregularly, then dropped out.]
>
> "I feel that this project has been a great help to the school. Many many children have benefited through this project. I would like to see the project continued."
>
> "For the amount of time and people involved in this project, I do not feel that a meaningful growth in the children's development is taking place."
>
> "Because of its value, such a program would be an asset to any classroom."
>
> "I cannot praise the idea behind the Upswing program too highly. For children who are retarded for any reason the Upswing policy gives them self-importance and enough self-confidence to attempt to learn to succeed in school work—to many, a fresh and new concept."



My first impression is that Project Upswing will: *(check one)*

a. Be beneficial to most of the children participating .... ☐
b. Be beneficial to some of the children participating .... ☐
c. Not be beneficial to any of the children participating .... ☐

FIGURE 5.14. TEACHER OPINIONS ABOUT UPSWING'S POTENTIAL TO HELP CHILDREN, ALL CITIES

TABLE 5.10

TEACHER OPINIONS ABOUT UPSWING'S POTENTIAL TO HELP CHILDREN, BY CITY

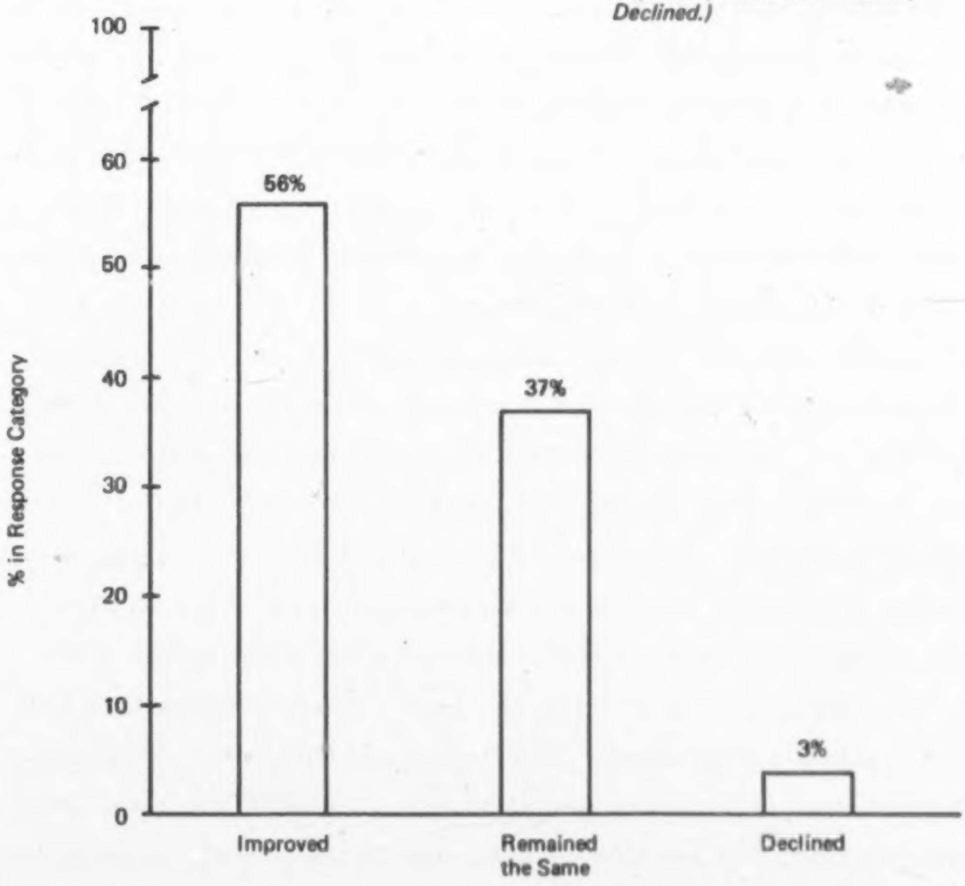
Opinion of Project	Denver	Oxford	St. Louis	San Francisco	Total
Beneficial to most children	26 58%	10 63%	17 68%	17 65%	70 63%
Beneficial to some children	16 36%	6 37%	7 28%	9 35%	38 34%
Not beneficial to any children	3 7%	0 0%	1 4%	0 0%	4 3%
Total	45 100%	16 100%	25 100%	26 100%	112 100%

Teacher Observations of Changes in Children Since Tutoring Began

Figure 5.15 indicates that the teachers saw improvement in the reading ability of over half of the children they reported to be involved in Upswing at the time the first impressions questionnaire was completed. They saw no change in the reading of about one-third of these children, and a decline in the reading of 3% of the children.

Looking at the same data by city (Table 5.11), it appears that roughly half of the tutored children in St. Louis and San Francisco may have made gains in reading since the start of tutoring, while 57% of the Oxford children and 64% of those in Denver may have made gains. The least improvement was noted in San Francisco, where the teachers indicated that slightly more than half of the pupils demonstrated no change in reading ability. Again it is stressed that teachers may not have reported on all of their pupils who were being tutored at the time. It could be, for example, that the 53 children assessed by Oxford teachers actually represent only a little over half of the Upswing child population there. This is not likely, but it is possible.

From Figure 5.16, the Upswing teachers indicate that the children's behavior or attitudes toward school tended to remain the same from the start of tutoring to the time the first impressions questionnaire was completed. They saw no change in about half of the children, versus improvement in the behavior/attitudes of about one-third. In Table 5.12 we see that Denver teachers observed more improvement in behavior or attitude toward school (47% of the children improved, 40% remained the same, and 5% declined) than the teachers in the other cities. St. Louis teachers observed the least (32% of children improved, 56% remained the same, 8% declined). The Oxford and San Francisco teachers also indicated that more children remained the same than improved. The question arises whether there was need for improvement in the behavior or attitudes of the children. ORI's interviews indicated that in a sizable number of cases there was need. Nevertheless, improvement in behavior is not highly correlated with increase in self-esteem or reading. In fact, during ORI's interviews,



Please indicate any changes you have noticed in the reading of the Upswing pupils since they began working with the tutors. *(Response choices were: Improved, Remained the same, Declined.)*

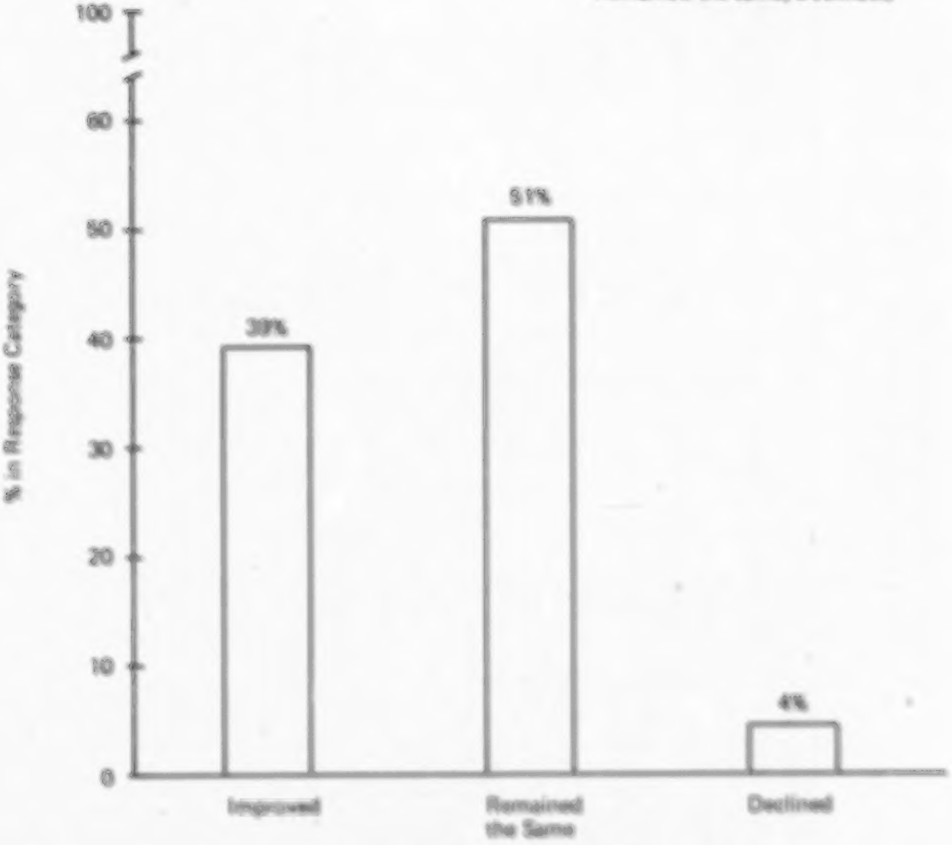
FIGURE 5.15. TEACHER OBSERVATIONS OF CHANGE IN CHILDREN'S READING ABILITY, ALL CITIES

(Nonresponse to question: 4%.)

TABLE 5.11

TEACHER OBSERVATIONS OF CHANGE IN THE CHILDREN'S READING ABILITY, BY CITY

Assessment of Reading Ability	Denver	Oxford	St. Louis	San Francisco	Total
Improved	49 64%	30 57%	39 52%	18 47%	136 56%
Remained the same	22 29%	19 36%	28 37%	20 53%	89 37%
Declined	2 3%	0 0%	5 7%	0 0%	7 3%
No response to question	3 4%	4 7%	3 4%	0 0%	10 4%
Total	76 100%	53 100%	75 100%	38 100%	242 100%



Please indicate any changes you have noticed in the general behavior/attitude toward school of the Upswing pupils since they began working with the tutors. *(Response choices were: Improved, Remained the same, Declined.)*

FIGURE 5.16. TEACHER OBSERVATIONS OF CHANGE IN CHILDREN'S BEHAVIOR/ATTITUDE TOWARD SCHOOL, ALL CITIES

(Nonresponse to question: 6%.)

TABLE 5.12

TEACHER OBSERVATIONS OF CHANGE IN CHILDREN'S BEHAVIOR/ ATTITUDE TOWARD SCHOOL, BY CITY

Assessment of Change in Behavior	Denver	Oxford	St. Louis	San Francisco	Total
Improved	36 47%	21 40%	24 32%	14 37%	95 39%
Remained the same	30 40%	28 53%	42 56%	22 58%	122 51%
Declined	4 5%	0 0%	6 8%	0 0%	10 4%
No response	6 8%	4 7%	3 4%	2 5%	15 6%
Total	76 100%	53 100%	75 100%	38 100%	242 100%

it became apparent that in several cases self-esteem and reading achievement increased, but school attitude and behavior in class became difficult for the teacher to handle. This point will be clarified by data from the final questionnaire, provided that the response rates are high enough.

Teacher Comments About Changes in the Children Since Tutoring Began

> "Both of the students have certainly grown. Their attitudes are excellent. It's too bad that testers don't measure general attitude or behavior. These children had very little interest for learning when school first started; now they have a great interest for learning to read."
>
> "This program has been very helpful to a little boy whose name was chosen. He is no longer withdrawn, but has become active with his peers."
>
> "The ones who are being tutored have shown marked improvement."
>
> "These children who have been helped are, in general, making improvements—socially, intellectually, and emotionally."

Teacher Assessment of Children's Responses to Volunteers

According to the teachers, 76% of the Upswing children reported on liked their volunteers at the start of tutoring. Only 13% of the children showed no reaction (were "neutral"), and only 1% showed hostility (Figure 5.17). Table 5.13 shows that on an individual city basis as well, a large majority of the children (an average of 76%, with a range from 72% in Oxford to 84% in Denver) showed positive attitudes toward their volunteers.

Teacher Comments on Children's Responses to Volunteers

> "I don't know how it worked with the children, because none of my tutors came."
>
> "Some of the children ask every day if 'their' Project Upswing volunteer is coming today because they have something to show them or just generally want to see their special person."
>
> "My students all enjoy their work with their tutors and look forward to having them come."
>
> "There was a problem in that the aide Clinton was assigned to was not good for him. She might have worked out with another child. Thus, mis-matching can be a serious problem."

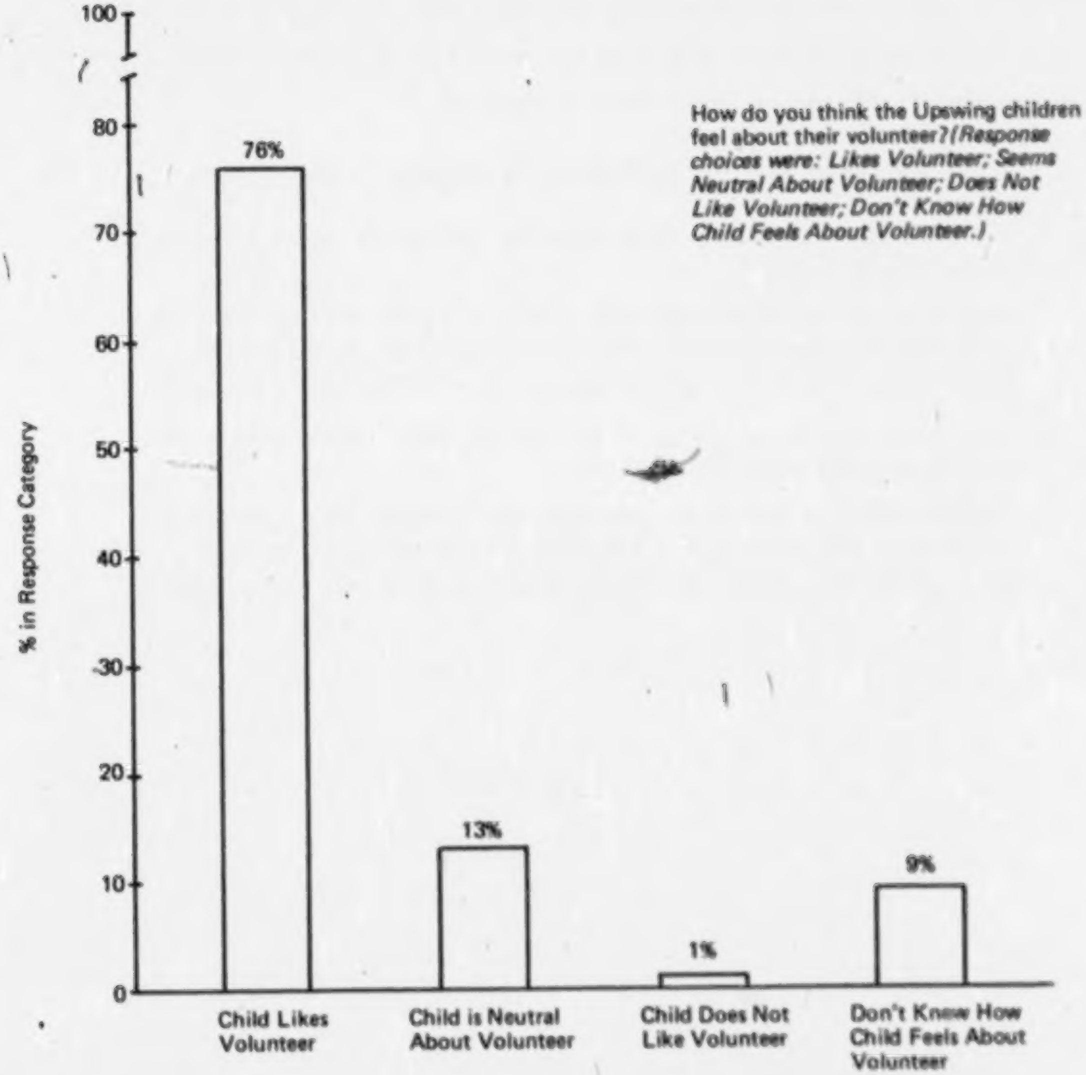


FIGURE 5.17. TEACHER OBSERVATIONS OF CHILDREN'S RESPONSES TO VOLUNTEERS, ALL CITIES

(Nonresponse to question: 1%.)

TABLE 5.13

TEACHER OBSERVATIONS OF CHILDREN'S RESPONSES TO VOLUNTEERS, BY CITY

Assessment of Child's Response	Denver	Oxford	St. Louis	San Francisco	Total
Child likes volunteer	64 84%	38 72%	55 73%	28 74%	185 76%
Child is neutral about volunteer	7 9%	7 13%	12 16%	5 13%	31 13%
Child does not like volunteer	1 1%	0 0%	1 1%	1 3%	3 1%
Don't know how child feels about volunteer	4 5%	6 11%	7 10%	4 10%	21 9%
No response to question	0 0%	2 4%	0 0%	0 0%	2 1%
Total	76 100%	53 100%	75 100%	38 100%	242 100%

Teacher Opinion of Volunteer Training

The most important point to be made about Figure 5.18 is that almost half of the teachers said they knew nothing about the training given to volunteers. Forty-one percent thought that it was either excellent or adequate, and 10% found it inadequate. On a by-city basis, the St. Louis and San Francisco teachers were significantly less well-informed about volunteer training than the Denver and Oxford teachers (Table 5.14). About two-thirds of the St. Louis and San Francisco teachers had no idea what training was offered to the volunteers, versus 25% of the Denver teachers and 37% of those in St. Louis.

The original project design statement says that, "hopefully, [teachers] will not know to which experimental group...Upswing pupils have been assigned."[6/] This means that the teachers "hopefully" would not know whether their pupils were assigned to trained or untrained volunteers, and it implies that teachers probably would not know what was included in the training. There is an inconsistency here with another aspect of the project design, or at least, with its interpretation. It was assumed that the untrained volunteers would work more closely with the teachers than the trained, that they would be "teacher-directed" to the extent the teachers were willing and able to give direction. ORI had not been brought into the project at the time these plans were made and has never understood this apparent conflict: How could teachers give more direction to untrained volunteers if they did not know who was untrained?[7/] In any case, the plan was not practical, because teachers and volunteers meet. Many teachers, perhaps most, knew the training status of the volunteers assigned to their pupils, and, as can be seen in Figure 5.18, about half of the responding teachers knew enough about volunteer training to have an opinion about it.

[6/] U.S. Office of Education, Report From Project Upswing Directors' Meeting, May 17-18, 1971, p. 1.

[7/] There is further confusion because the Project Upswing Summary (pp. 7,8) also issued by the U.S. Office of Education (no date given), stated that one goal of the project was "To provide an interchange of ideas and support with the classroom teacher and volunteer," and, further, that "The training sessions

The training given to volunteers seems to have been: *(check one)*

a. Excellent .... ☐
b. Adequate .... ☐
c. Inadequate .... ☐
d. I have no knowledge of the training given to volunteers........................ ☐

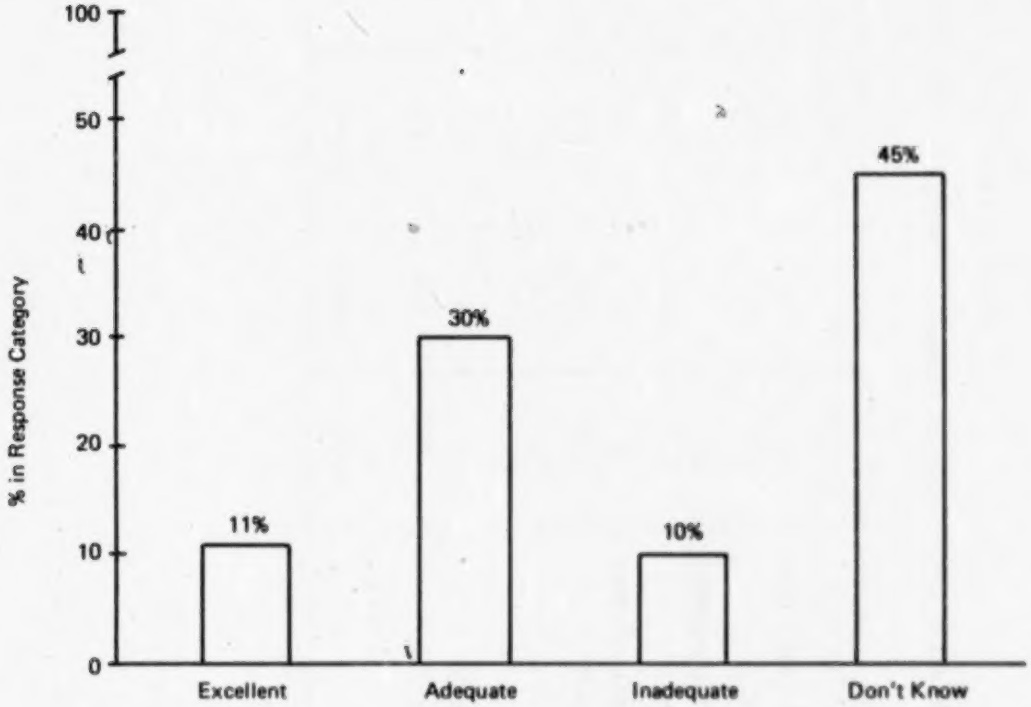


FIGURE 5.18. TEACHER OPINION OF TRAINING GIVEN TO VOLUNTEERS, ALL CITIES

(Nonresponse to question: 4%.)

TABLE 5.14

TEACHER OPINIONS OF TRAINING GIVEN TO VOLUNTEERS, BY CITY

Opinion of Training	Denver	Oxford	St. Louis	San Francisco	Total
Volunteer training was excellent	6 13%	3 19%	1 4%	3 12%	13 11%
Volunteer training was adequate	18 40%	7 44%	4 16%	4 15%	34 30%
Volunteer training was inadequate	8 18%	0 0%	1 4%	2 8%	11 10%
Don't know	11 25%	6 37%	17 68%	17 65%	51 45%
No response to question	2 4%	0 0%	2 8%	0 0%	4 4%
Total	45 100%	16 100%	25 100%	26 100%	112 100%

Given that the project design did not require that the teachers be informed about the exact nature of the training given to volunteers, Upswing was to be explained to them. It would be reasonable for teachers to be told generally what materials and techniques the trained volunteers were prepared to use, even though the trained were to work independently. A fairly frequent comment in teacher interviews during ORI's recent visits to the cities was that teachers should be informed about volunteer training. The city project directors agreed on this point as early as the January 1972 meeting in Washington, and a requirement was established that the content of volunteer training would be one topic covered in the workshops to be held for Upswing teachers before the 1972-73 project gets under way.

Thirty percent of the teachers did know something about the training, and considered it adequate, while 11% considered it excellent and 10% found it inadequate (Figure 5.18). From Table 5.14, it appears that there may have been some tendency for Denver teachers to have a lower opinion of volunteer training than the Oxford teachers. Eighteen percent in Denver found it inadequate, while none in Oxford found it so. In addition, a somewhat higher percentage of the Oxford teachers rated the volunteer training as "excellent" (19% versus 13% in Denver).

Teacher opinions concerning the adequacy of volunteer training would have to be based almost entirely on observation of the tutored children in the classroom rather than on analysis of training content and execution or of volunteer performance during tutoring sessions. ORI sought these opinions to obtain a rough measure of teacher attitudes toward volunteer competence.

---

for the volunteers will also be scheduled so that the teachers may participate if they so desire." (As far as ORI knows, teachers were not invited to the volunteer training sessions in any city.) From this, it would seem the teachers were to know the training status of volunteers and the content of the training given.

Teacher Comments About Volunteer Training

"I'm not sure the training in special methods has been particularly helpful."

"The volunteers work very well with the children, but I don't know what the training was."

"Volunteer trained [sic] need more direction and supervision than teacher directed volunteers."

"I would like to see them use a few more materials related to our reading program."

"I think teachers should know what training has been given."

"Don't know whether our aides are trained or not. Also don't know how they were trained."

Teacher Attitudes Towards Working With Volunteer Aides

A general question about teacher attitude toward volunteer assistance was included on the first impressions questionnaire in an attempt to get an unobtrusive check on teacher attitude toward Upswing volunteers. It was thought that positive general attitude might support and help explain positive attitude toward Upswing volunteers, should those be the findings. On the other hand, negative general attitude might, in part, explain negative attitude toward Upswing volunteers. However, no clearly valid interpretation can be made of general attitude toward working with aides because it appears from the comments on the question that teachers interpreted it in more than one way.

In Figure 5.19 it is seen that 84% of the total population said they felt most teachers welcome volunteer assistance, while 10% felt that most prefer to handle their classes alone. (Six percent did not answer the question, many of them indicating that they could speak only for themselves on this issue.) These responses are reasonably consistent with the responses to a specific question on teacher willingness to work with Upswing volunteers in the next school year (see Figure 5.20). It should be noted, however, that many teachers qualified their responses to this question in the comments space provided. Most frequently, they wrote that an aide is welcomed if he or she is dependable and/or effective, or if there is a need for an aide ("it depends on the class"), or that "it depends on the teacher."

Table 5.15 raises questions about these data. The results for Denver, Oxford, and St. Louis are relatively consistent, with Oxford and St. Louis teachers showing the greatest enthusiasm for volunteer assistance. Less than 10% of the teachers in those cities said they felt most teachers prefer to work alone (7% in Denver, 0% in Oxford, and 4% in St. Louis). In San Francisco, however, 27% (seven teachers) said they felt most teachers prefer to work alone. ORI checked the San Francisco comments on this question and found that four of the seven teachers who responded "negatively" noted that, while they felt most teachers prefer to work alone, they personally welcome volunteer

I feel that: *(check one)*
a. Most teachers prefer to handle their students alone .... ☐
b. Most teachers welcome volunteer aides.......... ☐

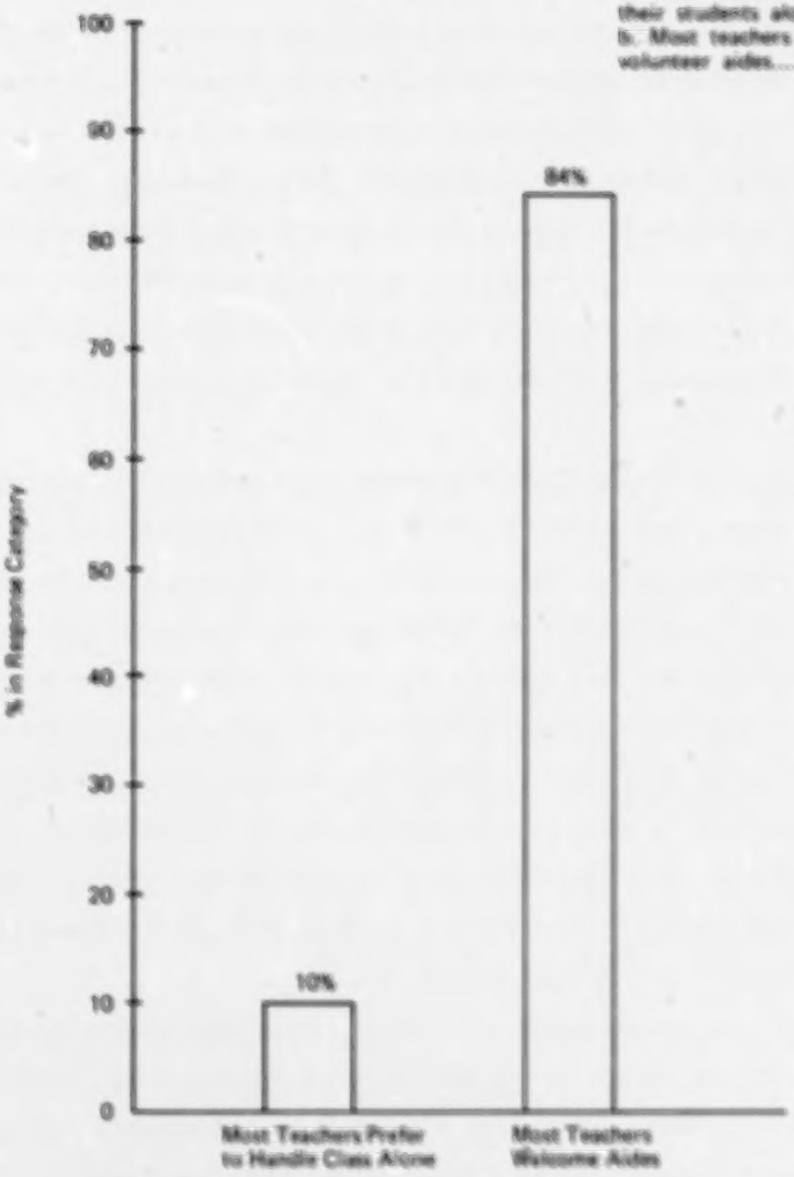


FIGURE 5.19. TEACHER ATTITUDES TOWARD WORKING WITH VOLUNTEER AIDES, ALL CITIES

(Nonresponse to question: 6%.)

TABLE 5.15

TEACHER ATTITUDES TOWARD WORKING WITH VOLUNTEER AIDES, BY CITY

Attitude	Denver	Oxford	St. Louis	San Francisco	Total
Most teachers prefer to handle class alone	3 7%	0 0%	1 4%	7 27%	11 10%
Most teachers welcome aides	39 86%	16 100%	24 96%	15 58%	94 84%
No response to question	3 7%	0 0%	00 0%	4 15%	7 6%
Total	45 100%	16 100%	25 100%	26 100%	112 100%

assistance. Since it is evident from the comments that answers may have been based on inconsistent reference points, a valid interpretation of this difference between city populations, other than that the difference is an artifact caused by a poor choice of question, cannot be made.

Teacher Comments on Working With Volunteer Aides

"Volunteers only come at their convenience." [This teacher felt most welcome paid aides.]

"Many teachers would like the aides but do not want to bother with additional paperwork necessary in a special program."

"Teachers welcome aides if the aides reinforce what the teacher is doing."

"I do not believe any teacher has time enough to do all the things she wants to do with all the children. An aide is an invaluable asset."

"Depends on teacher."

"I welcome mature, aware women who do not take up much of my time, are self-starters and get along well with the children, only."

"The only problem I have found is that some volunteers have not been dependable."

[Teacher likes working with volunteers] "Only if the volunteers were prompt and consistent in their visits."

"If they do not disturb and interrupt the class. If they are dependable."

Teacher Willingness to Work With Upswing Volunteers Again

Figure 5.20 shows that 71% of the respondents said they would like to work with Upswing volunteers in the next school year. Eighteen percent were undecided at the time the questionnaire was completed, and 10% said they were not willing to work with Upswing volunteers again.

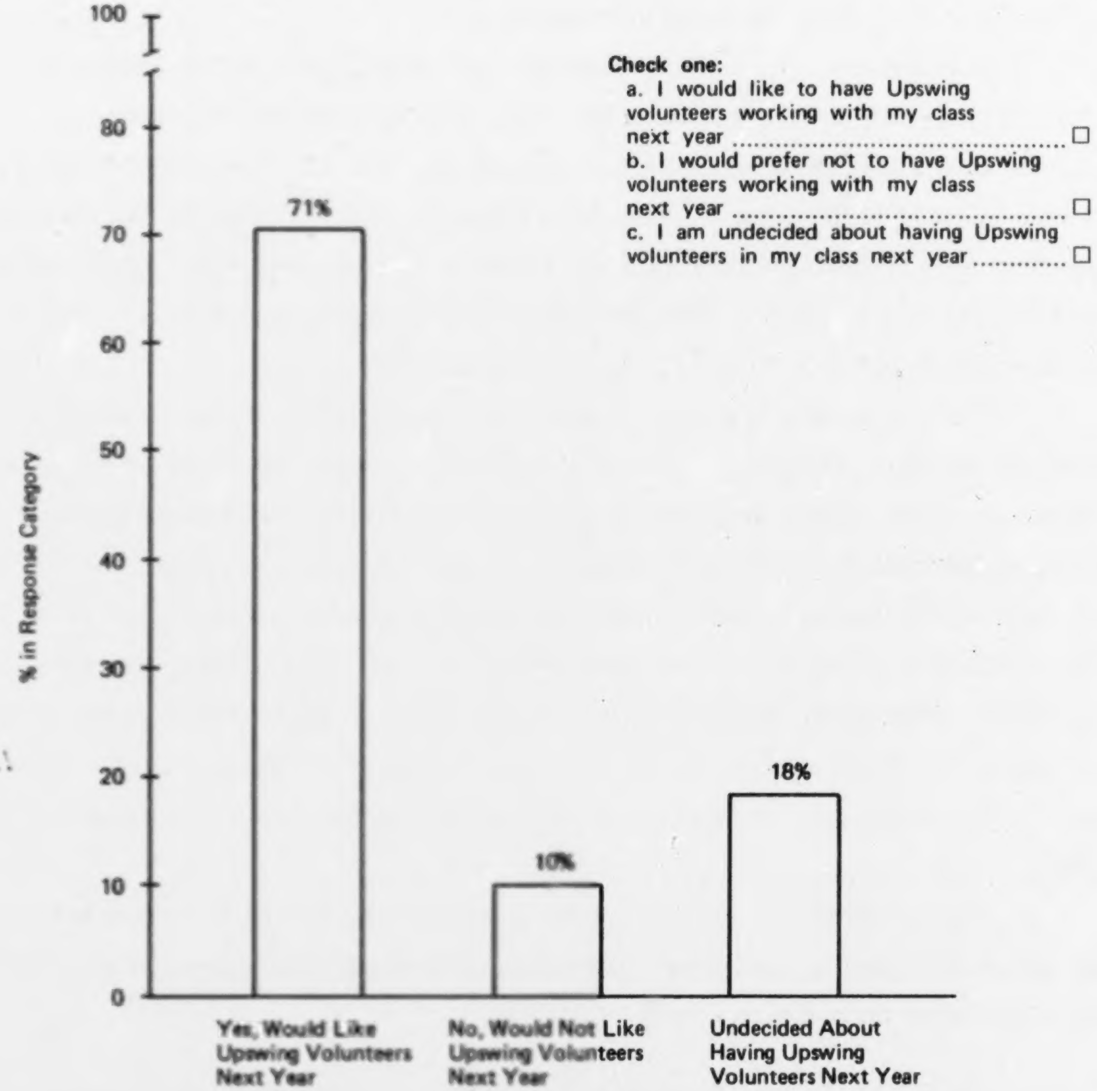
From Table 5.16, Oxford teachers most often had positive feelings about working with Upswing volunteers: 88% said they would like to do so again and none said they would be unwilling to do so. The St. Louis responses are only slightly less positive, with the difference being that 8% of the teachers there said they would not like Upswing volunteers again next year. About three-fourths of the San Francisco teachers answered the question positively. Only 4% answered negatively, and 19% were undecided.[8]

Table 5.16 shows some difference in the attitudes of Denver teachers toward Upswing volunteers. If the data in Table 5.15 can be accepted as valid indicators, their general attitude towards working with aides is quite positive—86% said they felt most teachers welcome aides. However, only 58% (26 teachers) said they would like Upswing volunteers to work with their pupils again next year, while 18% (8 teachers) said they would not and 24% (11 teachers) were undecided. This distribution of opinion is particularly interesting in view of the fact that the Denver teachers noted more improvement than those from the other cities in the reading ability and behavior/attitude of children since tutoring began.

ORI reviewed the questionnaires completed by the 19 Denver teachers who were undecided or said they did not want Upswing volunteers again. Seventeen commented on their reasons as follows:

---

[8] It should be remembered that the San Francisco responses are less reliable than those from the other cities as indicators of the attitudes of the total city teacher population because of a lower response rate. The margin for error is increased slightly in this case because 4% of the San Francisco teachers did not answer the question about willingness to have Upswing volunteers tutor their pupils next year.



Check one:

a. I would like to have Upswing volunteers working with my class next year .... ☐

b. I would prefer not to have Upswing volunteers working with my class next year .... ☐

c. I am undecided about having Upswing volunteers in my class next year .... ☐

FIGURE 5.20. TEACHER WILLINGNESS TO WORK WITH UPSWING VOLUNTEERS NEXT YEAR, ALL CITIES

(Nonresponse to question: 1%.)

TABLE 5.16

TEACHER WILLINGNESS TO WORK WITH UPSWING VOLUNTEERS NEXT YEAR, BY CITY

Response	Denver	Oxford	St. Louis	San Francisco	Total
Would like Upswing volunteers next year	26 58%	14 88%	20 80%	19 73%	79 71%
Would not like Upswing volunteers next year	8 18%	0 0%	2 8%	1 4%	11 10%
Undecided	11 24%	2 12%	3 12%	5 19%	21 18%
No response to question	0 0%	0 0%	0 0%	1 4%	1 1%
Total	45 100%	16 100%	25 100%	26 100%	112 100%

Type of Comment	No. of Teachers
Volunteer not dependable about coming to tutor.	6
Teacher does not have enough time to work with volunteer.	6
It is not good for the child to miss class.	2
Project Upswing is poorly coordinated.	2
It disrupts class to have people coming in and out.	1

Thus it seems that there was no single, overriding reason for misgivings about Upswing. It should be noted that comments of these kinds were made by teachers in all cities, including some who said they would like Upswing volunteers to work with their pupils next year.

Teacher Comments About Working With Upswing Volunteers Again

"Undecided because of poor[project] coordination."

"If they are dependable."

"Any volunteer who wants to help foster a child's growth is always welcome in the educational life of that child."

"I would like to use them only if they can be all trained and responsible tutors."

"Any added instruction just has to be helpful."

"The volunteers assigned to me have been most reliable, pleasant and helpful."

COMPARISON OF SELECTED VOLUNTEER AND TEACHER FIRST IMPRESSIONS OF PROJECT UPSWING

The teachers, as well as the volunteers, appear to have had generally positive first impressions of Upswing. Below is a comparison of the two populations' opinions of the project's potential to help children, of volunteer-child relationships, and of volunteer-teacher relationships.[9] In the referenced figures presenting volunteer opinion, percentages are given by training status; they were averaged for this volunteer-teacher comparison.

- The majority of both teachers and volunteers (63% and 74%, respectively) said they believed Project Upswing would be beneficial to most of the children participating. Only a negligible percentage of either population believed Upswing would be beneficial to no children. (Figures 5.2 and 5.14.)
- Both teacher and volunteer opinions support the conclusion that, generally, volunteer-child relationships were good. The volunteers indicated that they had little difficulty in establishing a positive relationship with the children (83% said the children responded to them with willing or hesitant cooperation). The teachers stated that 76% of the children on whom they reported liked their Upswing volunteers. (Figures 5.8 and 5.17.)
- The teachers' willingness to work with Upswing volunteers next year is an indication that despite any problems that may have arisen in the project, the teacher-volunteer relationships were generally

---

[9] ORI had planned to compare teacher and volunteer opinions about the adequacy of volunteer training. This was not possible because, as shown in Figure 5.18, 45% of the teachers said they knew nothing about it.

satisfactory. Seventy-one percent of the teachers said they would like Upswing volunteers again. The volunteers also seem to have found their relationships with teachers generally satisfactory. Close to 80% of the volunteers felt the teachers welcomed their assistance, and 61% felt they were receiving adequate guidance from the teachers. (Figures 5.20, 5.9, and 5.10.)

DENVER PARENTS' FIRST IMPRESSIONS OF PROJECT UPSWING

This subsection includes data from Denver parents only. So few questionnaires were returned by the parents from the other cities that nothing can be said about them (see Section I discussion of questionnaire handling and response rates, page 1-5). About 56% of the Denver parents responded. The 56% rate is taken as a "worst-case" because there is no way of determining exactly how many parents received forms. They were sent by the city project office to the schools for delivery to parents by the children. The completed forms were returned to the Denver office via the same route and then sent to ORI. The 56% figure is based on the number of Denver children who, according to ORI's data, should have been working with volunteers at the time—that is, 113 children.[12] (Our records show that 116 children in Denver originally were assigned volunteers. We were informed by the project office that three volunteers dropped out and were not replaced. The records on their three pupils were removed from ORI's data file.) The Upswing office in Denver was not aware of all volunteer attrition; however, the teachers were, and they very likely did not give the forms to children who never were tutored or whose tutors had stopped coming. The Denver teachers reported on 76 children in their first impression questionnaires, and, as stated in Section III, 75 Denver volunteers returned first impressions questionnaires. These people were regarded as 69% of the actual population although they may have been a larger percentage. ORI does not have attrition data to clarify this matter.

---

[12] In the Section II presentation of Denver children's background characteristics (data from the parent registration form), ORI used 110 as the base for computing the response rate. That was the only figure available for the population size about the time tutoring began. The number of children receiving Upswing tutoring changed frequently over the life of the project. It took some time for the volunteer-child assignments to be completed. Simultaneously, attrition was altering the total.

Parent Initial Opinion Summary

- Only four of the 63 Denver respondents attended the parent orientation meeting (held November 18, 1971 on the university campus). About 30% of those who did not attend wrote in the comments space that they did not know such a meeting took place.
- The overwhelming majority of respondents indicated that they felt Upswing was a good program that would benefit their children.
- They also said that their children appeared to enjoy working with a volunteer and appeared to enjoy receiving special assistance.
- They indicated (again by an overwhelming majority) that they feel parents should be involved in their children's education and should work with them regularly at home.

It is stressed that the findings summarized above, and described subsequently in more detail, should not be extrapolated even to the total population of Denver parents. It is highly possible that the sizable percentage of parents who did not respond would have different views about the project and the degree to which parents should be involved in their children's education. The most that can be said is that 90% of the respondents represent at least 54% of the total population of parents whose children were being tutored at the time the first impressions forms were filled out. Thus any 90% or greater consensus represents a majority view.

General Attitudes Toward Upswing

Table 5.17 gives the responses to two questions designed as indicators of parent attitude toward the project. An overwhelming majority (94%) of the parents in Denver were glad their children were selected to participate. Moreover, 81% believed Upswing would probably benefit the children.

TABLE 5.17

INDICATORS OF DENVER RESPONDENTS' GENERAL ATTITUDE TOWARD UPSWING

Question	Type of Response*			No Response	Total
	Favorable	Not Favorable	No Opinion/Don't Know		
How did you feel about Project Upswing selecting your child for special attention?	59 94%	0 0%	3 5%	1 2%	63 100%
How do you feel the Project Upswing experience probably will affect your child?	51 81%	1 2%	7 11%	4 6%	63 100%

*This table covers two questions from the first impressions form. The response choices were categorized as "Favorable," "Not Favorable," etc. The actual choices were: for the first question listed—"I am pleased...," "I am not pleased...," "I have no opinion...;" for the second question listed—"I feel that Project Upswing probably will benefit my child," "I feel that Project Upswing probably will not benefit my child," "I have no idea what effect Project Upswing will have on my child."

Children's Attitudes

Most of the responding parents (76%) believed their children were enjoying the special assistance from Upswing volunteers, although a sizable group (18%) were unsure—the children had expressed no feeling about it (Table 5.18). Ninety-two percent of the respondents said the children liked the volunteers with whom they worked.

Parent Involvement in Child's Education

The first impressions questionnaire included a three-part question aimed at determining the extent to which Upswing parents believed they should be involved in their children's education. In Table 5.19 we see that the Denver respondents, at any rate, endorse an active role for parents. The extent to which they actually are involved in their children's education is not documented.

TABLE 5.18

DENVER CHILDREN'S ATTITUDES TOWARD UPSWING AS PERCEIVED BY PARENTS

Question	Child's Attitude			No Response	Total
	Positive	Negative	Unknown		
How do you think your child feels about receiving volunteer assistance under Project Upswing?	48 76%	4 6%	11 18%	0 0%	63 100%
How do you think your child feels about his volunteer?	58 92%	1 2%	2 3%	2 3%	63 100%

TABLE 5.19

DENVER PARENTS' FEELINGS ABOUT HOW MUCH THEY SHOULD BE INVOLVED IN THEIR CHILDREN'S EDUCATION

Hypothesis	Parent Opinion		No Response	Total
	Agree	Disagree		
The only person who should teach my child to read is the teacher.	3 5%	56 89%	4 6%	63 100%
It is better for parents not to discuss classwork with a child who is having problems in school.	3 5%	57 90%	3 5%	63 100%
Parents whose children are having difficulty with first grade work should work with them regularly at home.	60 95%	1 2%	2 3%	63 100%

Volume II

Analysis of Tutoring Results and Final Impressions

I. INTRODUCTION

PURPOSE AND CONTENT

Volume I of this report, published in July 1972, presented an overview of Project Upswing's first-year design, and profiles of the major groups of participants—children, volunteer tutors, and teachers. It was established in Volume I that the control group and the two experimental groups of children were comparable in number and in characteristics measured by an initial test battery: IQ, level of visual-motor integration, and level of reading skill demonstrated on the Wide Range Achievement Test (WRAT). It was also established that the trained and untrained volunteers were comparable on various socioeconomic indicators (education, experience, socioeconomic status, etc.) and initial attitudes toward the project, tutored pupils, and teachers. Differences between the trained and untrained volunteers were noted in age and a related characteristic, student status.

Starting from these baselines, Volume II presents the analysis of tutoring outcomes: what happened to the children over the tutoring period; and of the many variables involved that ORI was able to measure, which appear to have been related to the results of tutoring. These are the questions of primary concern. In addition, this part of the report also explores aspects of the volunteer-teacher relationship, their role satisfaction, their opinions of Upswing, and volunteer training variables that appear important for those planning and managing a project like Upswing.

DATA SOURCES

All data presented in Volume I (see "Data Sources," pages 1-4 and 1-5) went into the analysis described here. Results of the final round of testing and end-of-year impressions of the project obtained from final project questionnaires complete the information for evaluation. The final test battery was identical to the initial battery except that the IQ test and vision and hearing checks were omitted.

DATA HANDLING

Child Test Data

The administration, scoring, and recording of the final tests were done just as in the initial round. The final battery was administered in May 1972 in all cities. ORI received all test results by the end of July 1972.

Final Impressions Questionnaires

Forms were distributed by ORI directly to volunteers at their homes and to teachers at their schools, in Oxford and St. Louis. The university project staffs took care of distribution in San Francisco and Denver. In all cases, postage-paid, pre-addressed return envelopes were attached to the questionnaires for their direct return to ORI.

ORI kept distribution lists and conducted a mail follow-up on non-responding volunteers and teachers approximately 3 weeks after the forms were first sent out. A third follow-up was conducted by telephone by the university project staffs.

Final parent questionnaires also were mailed out to the home addresses early in May. Initial returns were negligible. No follow-up on nonresponding parents was conducted. It was decided that such an effort would not be cost-effective. The most important information (family background characteristics) from parents had been sought in the Parent Registration Form, and returns on that were woefully inadequate, as described in Volume I.

The questionnaire handling procedures used for the final forms were much improved over those used previously. Good response rates were obtained only after considerable effort, but in a much shorter period of time.

ORGANIZATION OF VOLUME II

The next section presents pre- and post-tutoring test results, along with volunteers' and teachers' assessments of changes in the children. Relationships between project evaluation criteria and various possible explanatory variables are explored. Section III contains descriptive analysis of volunteer and teacher impressions of the project stated on the final questionnaires. Case studies presented in Section IV describe the interactions of the tutoring situation, while Section V reviews project costs in relation to project benefits as measured by change in WRAT score. Section VI deals with volunteer attrition. Conclusions about project outcomes and the Phase I evaluation process are drawn in the final section, considering implications for Phase II.

II. ANALYSIS OF TUTORING RESULTS

PURPOSE AND CONTENT

This section describes how the Upswing children changed over the tutoring period in the study's criterion areas: reading achievement, psychomotor behavior, and self-esteem. Changes pointed up by the objective tests used are presented first; then teachers' and volunteers' subjective assessments are presented. The section concludes with an examination of significant relationships between the criterion variables and of how they appeared to be influenced by selected independent variables.

SUMMARY OF RESULTS

- Tutoring was clearly effective in helping children improve their reading skills. There was a statistically significant difference between the mean reading test score of the tutored and untutored groups; however, the number of points difference between the means was not great.
- The children with lower initial levels of reading proficiency tended to show the greatest improvement.
- Based on amount of change in children's test scores over the tutoring period, training did not increase volunteer effectiveness.

- Tutoring had no apparent effect on the children's visual-motor integration skills according to the Beery-Buktenica test results.
- Poor visual-motor integration skills as measured by the Beery-Buktenica did not prevent children from making progress in reading.
- Teachers and volunteers both saw improvement in children's self-esteem as an important benefit of one-to-one tutoring. Teachers, for example, said that two-thirds of the children considered to have esteem problems increased their self-esteem.
- Teachers and volunteers both noted reductions in hyperkinetic and distractible behavior.
- Based on the multiple regression analysis, a whole complex of conditions is involved in changing children's school performance. There is no one "key" or small set of key variables.
- Volunteers' attitudes about how well they were prepared to use the methods and materials of tutoring showed the strongest relationship to change in reading achievement of all the variables considered.
- Associated with the "adequacy of preparation" variable, above, is a cluster of conditions, all related to volunteer satisfaction, that appear to have been related to child progress in reading.
- Improved self-esteem and psychomotor control appear to have been related to improved reading achievement as measured by the WRAT.

CHILD POPULATION IN THE FINAL ANALYSIS OF UPSWING TEST DATA

Fewer children are represented in the final analysis of Project Upswing test data than were represented in the preliminary analysis. The number was reduced for the following reasons:

- Children transferred out of schools.
- Increase in volunteer attrition (a volunteer had to have tutored up until March 1, 1972, in order for the child to be included in the analysis; if the volunteer dropped out before this date, the child was excluded).
- Lack of final test data for child.

The number of children involved varies from test to test. A child may have missed only one from the entire final battery. ORI felt it would be unfair to discount a child totally from the evaluation if he/she had missed only one test. We therefore conducted separate analyses, obtaining the maximum number of children for each test.

A summary follows for each test in the battery indicating the total number of children used for that test (by status group), the cities involved in the analysis, and what conditions may have reduced the number of children considered.

The WRAT

Following is a table of the size of the child population for the analysis of initial WRAT results in Volume I against the final WRAT population, by status group (control—C; children with untrained volunteers—U; and children with trained volunteers—T). A child was omitted from the analysis if his/her birthdate was missing from the test record form (the WRAT is age-adjusted) or if no final WRAT score was given.

Pre-Test WRAT Population	Post-Test WRAT Population
C-178	C-163 (92%)*
U-135	U-113 (84%)*
T-160	T-130 (81%)*

* Percentage of initial test population represented in final analysis.

Less than a fifth of the children with trained and untrained volunteers were excluded from the final analysis of the WRAT. Almost all (92%) of the control children were included.

The numbers of children from each city who were included in the initial and final WRAT analysis were as follows, by status group:

City	Control		With Untrained Volunteer		With Trained Volunteer	
	Pre	Post	Pre	Post	Pre	Post
Denver	44	38 (86%)	35	30 (86%)	45	38 (84%)
Oxford	50	46 (92%)	48	46 (96%)	31	31 (100%)
St. Louis	50	48 (96%)	30	25 (83%)	45	40 (89%)
San Francisco	34	31 (91%)	22	12 (55%)	39	21 (54%)

Numbers in parentheses are the percentages of the initial groups represented in final analysis.

All four cities had most of the original control (C) population left in the WRAT analysis because the only factor causing reduction of that population was child attrition, which was low. The only severe reductions in any groups occurred in San Francisco; only a little over 50% of the original WRAT populations of T and U children in that city remain in the final analysis. This was caused primarily by volunteer attrition and secondarily by children's absence during the final testing period.

Volunteer attrition had less impact in Oxford because of the opportunity for closer personal interaction and because untrained volunteer attritees were replaced.

The Metropolitan Achievement Test Series

The reading subtest administered in Denver is not comparable with initial Primer reading subtest so that the data could not be used in the final analysis. San Francisco was previously excluded from the analysis.[1] Therefore, only Oxford and St. Louis data are used in the final discussion of Metropolitan results. The number of children involved from each of those two cities was as follows:

City	Control		With Untrained Volunteer		With Trained Volunteer	
	Pre	Post	Pre	Post	Pre	Post
Oxford	50	40 (80%)	48	41 (85%)	31	30 (97%)
St. Louis	50	48 (96%)	30	26 (87%)	45	40 (89%)

The percentages given above show no extreme losses from the original populations in any group in either city.

The VMI

The analysis of the VMI pertains to Oxford, St. Louis, and San Francisco. The VMI was not administered in Denver at the beginning of tutoring because copies of the test could not be obtained in time for the scheduled testing; thus there was no point in including the test in the final battery in Denver. Following is a tabulation of the initial and final population sizes for the VMI for the three cities where it was given.

---

[1] See Volume 1, page 2-25, for explanation.

City	Control		With Untrained Volunteer		With Trained Volunteer	
	Pre	Post	Pre	Post	Pre	Post
Oxford	50	41 (82%)	48	42 (88%)	31	29 (94%)
St. Louis	50	48 (96%)	30	26 (87%)	45	40 (89%)
San Francisco	34	34 (100%)	22	9 (41%)	39	26 (67%)

Again the impact of volunteer attrition in San Francisco is evident. Only 41% of the children who had an untrained volunteer and 67% of the children with a trained volunteer were included. All of that city's control children considered in the initial VMI analysis were included. The other two cities are relatively equal in numbers of children who could be included in the evaluation.

SCORE CONVERSION PROCEDURES FOR UPSWING'S TEST BATTERY

The raw test scores were converted by computer to reduce the chance of error in hand conversion. The types of scores used in the final analysis are described below for each test.

WRAT

The WRAT standard score is the most precise and meaningful for comparative analysis and probably is the most readily understood. The WRAT standard score has a mean of 100 and a standard deviation of 15; thus it is statistically comparable to traditional IQ tests such as the WISC, although it is not directly comparable to the Slossen used in Upswing. The WRAT standard score is interpreted much like an IQ score, as explained in the test analysis.

Metropolitan Achievement Test Series

The Metropolitan Primer reading subtest was given to the Upswing children at the beginning of tutoring and the Primary I reading subtest at the end. The raw scores were converted to standard scores for statistical analysis.

since the latter are directly comparable from battery to battery and from form to form. However, the Metropolitan standard score cannot be interpreted like the WRAT standard score. To avoid confusion, ORI carried the conversion one step further for presentation purposes, describing the Metropolitan results in terms of percentiles. The Metropolitan is based on grade-level norms (it is not age-adjusted). The use of percentiles permits us to discuss readily where the Upswing children stood in relation to other first-grade children in the nation, regardless of age.

VMI

The VMI raw score converts to a chronological age equivalent, taking the child's sex into account because of differential rates of maturity in males and females. Preliminary analysis showed that all groups of children tested as immature in visual-motor integration skills both before and after tutoring, even applying the less rigorous conversion scale for boys. Thus in the presentation of evaluation results sex differences are not described. Where there was a difference between age equivalents for males and females, ORI averaged the two or used the age equivalent for males.

ANALYSIS OF INDIVIDUAL TEST RESULTS

The WRAT

In Volume I, Section II, all groups of children (C, U, T) in all cities were established as comparable in starting level of reading achievement as measured by the WRAT (Level I) reading subtest. The Student's T-test showed no significant difference (criterion level $\alpha = 0.05$) between groups of the population as a whole (all cities combined), between groups in any city, or between cities in their total Upswing child populations.

The WRAT documentation provides standard score classifications as follows:

Standard Score	Classification
130 and up	Very superior
120-129	Superior
110-119	High average
90-109	Average
80-89	Low average
70-79	Inferior
69 and below	Defective

The initial test means for all Upswing groups fell into the low-average range,[2] with very small standard deviations. This indicates that the project began with a very homogeneous group of children whose problems in reading apparently were not severe. As discussed in Volume I, what children showed on the test may have been different from what they showed in the classroom. Based on the limited Metropolitan results available and on information from teachers and volunteers, ORI believes that in many cases classroom performance pointed to lower skills than were indicated by the test scores.

All groups of children (C, U, and T) showed gains in reading achievement as measured by the WRAT. Figure 2.1 gives the mean standard score from the first and final WRAT for all of the children by status group. The figure shows that, as stated earlier, the initial means for all three groups fell in the "low average" category (range 80-89). The groups were virtually identical in mean standard WRAT score at the beginning of tutoring. On the final WRAT, all groups means fell in the "average" category (range 90 to 109).

---

[2] There is one exception to this: the initial mean score of San Francisco children with untrained volunteers was 79, at the top of the inferior range.

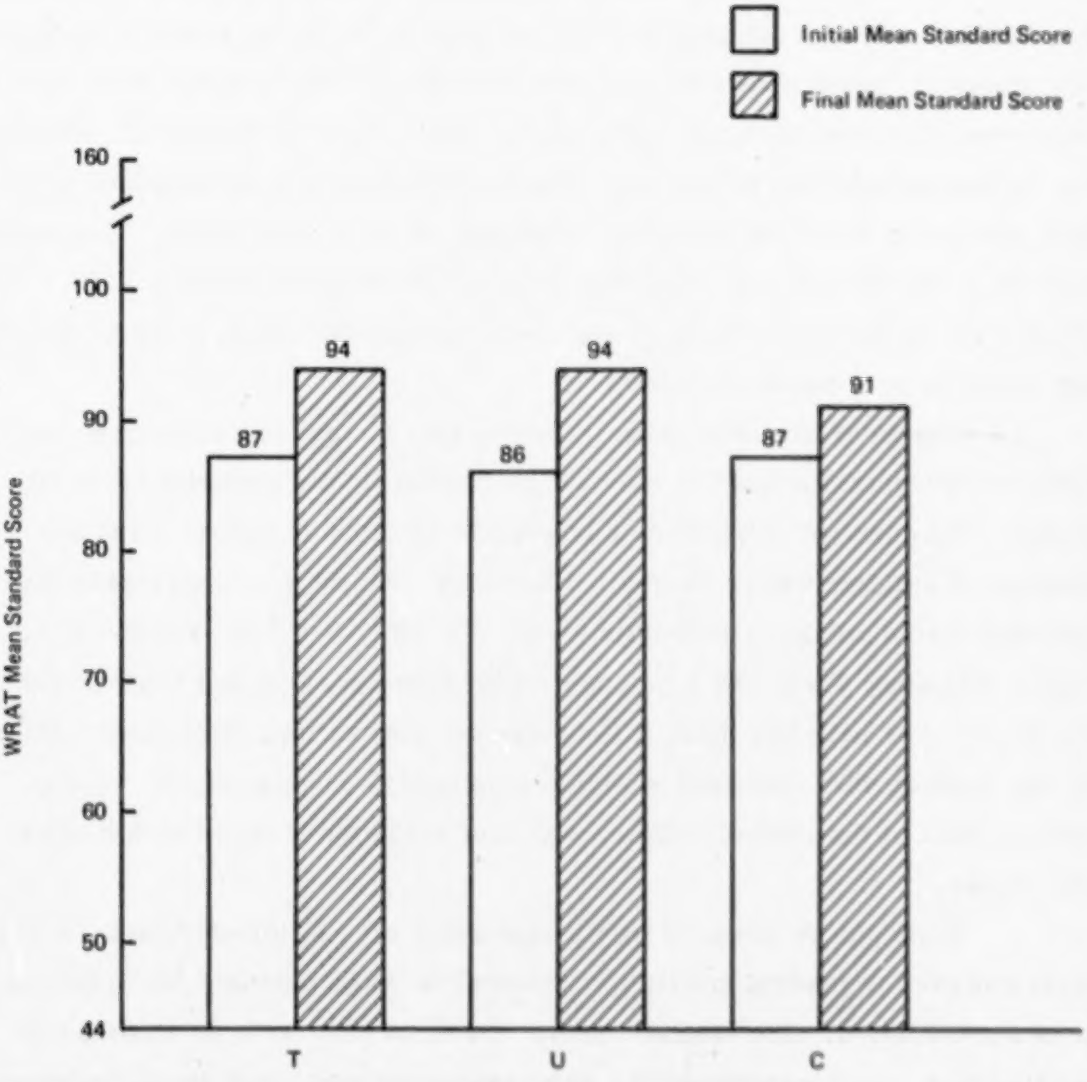


FIGURE 2.1. INITIAL AND FINAL MEAN STANDARD SCORES ON THE WIDE RANGE ACHIEVEMENT TEST, BY STATUS GROUP, ALL CITIES
(Range of WRAT standard score = 44 - 160 points.)

The mean gain in standard score of the T children was 7 points. The U children gained 8 points, while the control children gained 4 standard score points.

As might be guessed, the 1-point difference in the amount of change made by children with trained tutors versus children with untrained tutors (all cities combined) was not statistically significant (criterion level $\alpha = 0.05$). The Student's T-test affirmed, however, that the tutored children made more improvement in reading as measured by the WRAT than did the control children. The difference between tutored and untutored children's mean standard score gain was found to be statistically significant at the 0.001, level. This means that the same results would have occurred in 999 samples out of 1,000. Clearly the difference in level of reading achievement of these two groups was not likely to be a matter of chance.

The WRAT documentation indicates that a child can move from one achievement classification to the next by increasing his standard score 10 points. This amount of gain obviously would be quite important. The percentage of children whose scores increased 10 or more points was calculated for each status group. The results were: C - 22%, U - 37%, and T - 27%. These data show the C and T groups closest together, with the U group standing apart. ORI believes these differences are noteworthy. Well over a third of the children with untrained volunteers gained 10 or more points, versus about a fifth of the control children and over a quarter of those with trained volunteers.

It should be stressed that lesser gains are not insignificant. A child must progress in reading merely to maintain his WRAT standard score because it is age-adjusted. The standard score of a child who made no progress in reading (i.e., who maintained the same raw score over time) would decrease over time. Table 2.1 shows a quarter of the control group losing ground, versus 15% of the U group and 21% of the T group. About half of each group is in the moderate improvement area (no change in standard score to 9 points

TABLE 2.1

DISTRIBUTION OF AMOUNT OF CHANGE IN WRAT STANDARD SCORE FROM INITIAL TO FINAL TEST, BY STATUS GROUP, ALL CITIES

Number of Points Change in WRAT Standard Score	Children Making Given Amount of Change		
	Control	Untrained	Trained
-11 to -1	40 25%	17 15%	27 21%
0 to +9	87 53%	54 48%	68 52%
+10 or more	36 22%	42 37%	35 27%
Total	163 100%	113 100%	130 100%

gain). The percentages making major gains have already been discussed. What the data in Table 2.1 show is that the U group tended to improve more than any other. However, the T-test showed that the difference between that group and the group tutored by trained volunteers was not significant at the 0.05 level.

Figure 2.2 gives the initial and final mean WRAT scores by status group for each Upswing city. It should be noted at the outset that although the figure suggests there were some important differences between cities and between groups within cities, none of these apparent differences was found to be statistically significant. That does not mean that in fact they were not significant, it simply means that, statistically, the differences could well have occurred by chance. The sizes of the populations after the total groups were partitioned by city were small enough that the probability of chance differences is quite high.

Figure 2.2 shows that all three groups of children from Denver were originally performing in the "average" reading achievement range, although just barely. The children in St. Louis scored on the borderline of this level on the initial test. In looking at Oxford, however, the children were performing barely in the "low average" category; all of the groups had a mean standard score of 83 on the initial WRAT. San Francisco's untrained group scored on the borderline of the "inferior" category (70-79), the mean score being 79, whereas the C and T groups were in the middle of the "low average" category.

The Denver director feels that teachers there may well have been overly influenced by socioeconomic characteristics in identifying children for the project. She felt that there may have been a tendency for teachers to perceive lower skills in inner-city children (predominately black and Mexican-American children) from low-income families. This kind of phenomenon has been noted in other research and might have occurred in other Upswing cities as well as Denver.

It appears from the data that, whatever the reason, teachers tended to underestimate the reading skills of the children as indicated by the WRAT. Many commented on questionnaires and in interviews that they had to identify

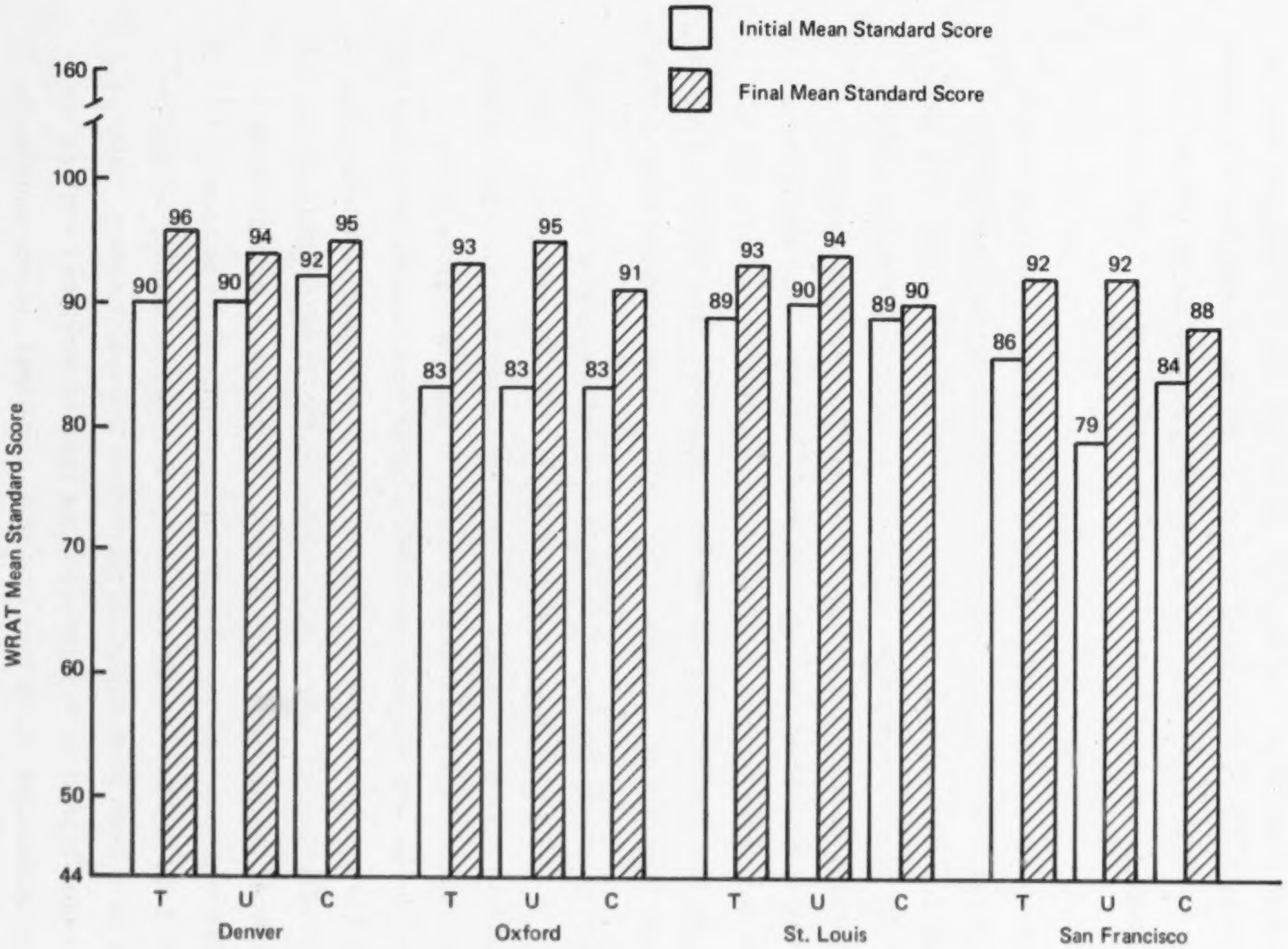


FIGURE 2.2. INITIAL AND FINAL MEAN STANDARD SCORES ON THEWIDE RANGE ACHIEVEMENT TEST BY STATUS GROUP, BY CITY
(Range of WRAT standard score = 44 - 160 points.)

children for the project too early in the year. Another factor that could be quite important was delay in completing the initial test battery. As noted in Volume I (page 2-14) initial testing continued through January in some cities. The number of these cases was not documented, but the longer school and tutoring experience of such children could have inflated the "pretutoring" means.

The Metropolitan data also are of interest here. As discussed in Volume I (pages 2-28, 29) the children scored lower on the Metropolitan Primer reading subtest than on the initial WRAT reading subtest. The Metropolitan is, by design, curriculum based. It would appear that the criteria used by teachers in selecting children for Upswing may have been more in tune with the Metropolitan than with the WRAT results. This supposition tends to be supported by the correlations between teacher assessment of change in reading achievement and change measured by the WRAT and Metropolitan (see "Analysis of Influences ... " later in this section, page 2-73 ff.).

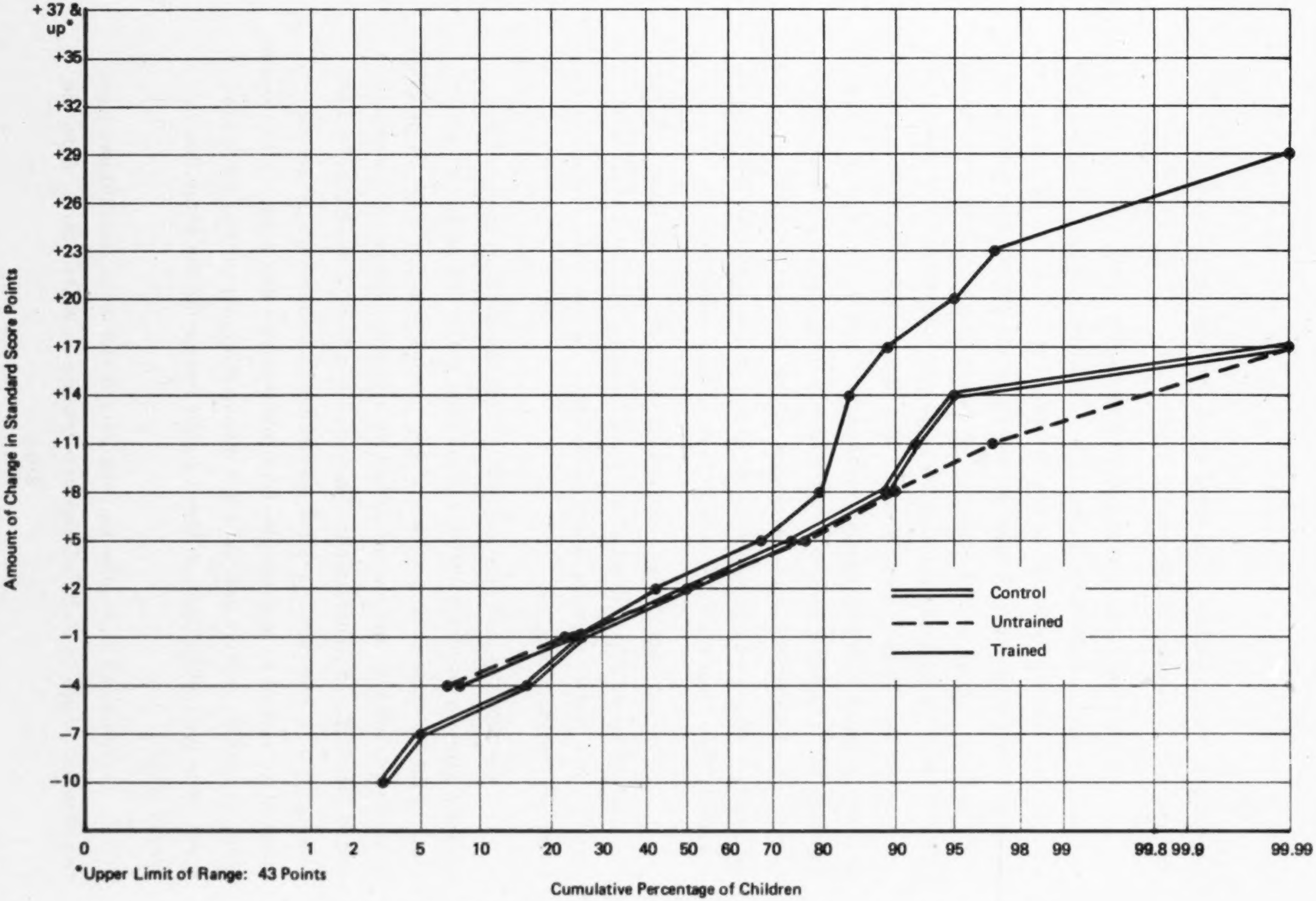
The means in Figure 2.2 indicate that the greatest gains were made by children in Oxford -- all groups, regardless of C, U, or T status. The control children in Oxford increased their scores more than any other group in any city except the T and U groups in Oxford and the U group in San Francisco. These data suggest that factors other than tutoring were working strongly in the children's favor in Oxford. There is no public kindergarten in the State of Mississippi, and a large number of the Upswing children had no previous school experience. Nevertheless, they were apparently ready to make strides with instruction. In ORI's opinion both of the schools in Oxford are outstanding, and the county school is a showcase. Quality of schools appears to have been more important there than Upswing tutoring, unless the control children tended to be provided other special services, such as remedial reading instruction, more than the tutored children, to compensate for lack of a tutor. However, there apparently was a difference between the tutored and control children that tends to be obscured by the means. This difference is illustrated subsequently (Figure 2.4).

Another dramatic change occurred among the control group children in San Francisco. Their mean increase in WRAT score of 13 points took them, as a group, from the "inferior" to the "average" range of reading achievement. The San Francisco project director believes that the greater improvement of the U children as a group can be attributed to volunteer experience and attrition. In accordance with the project design, untrained volunteers were given little or no assistance by the Upswing staff. The director believes that this resulted in heavy attrition of inexperienced volunteers in that group, leaving a core of veterans from the San Francisco Education Auxillary, the city's well-established school volunteer group, who were able to function on their own. In the director's view, it was probably the expertise of these people, based on experience, that made the difference in U children's performance.

Again it is noted that achievement gains of San Francisco children who had untrained Upswing tutors were not found by statistical test to be significantly greater than the gains of the other San Francisco groups because of the few children involved.

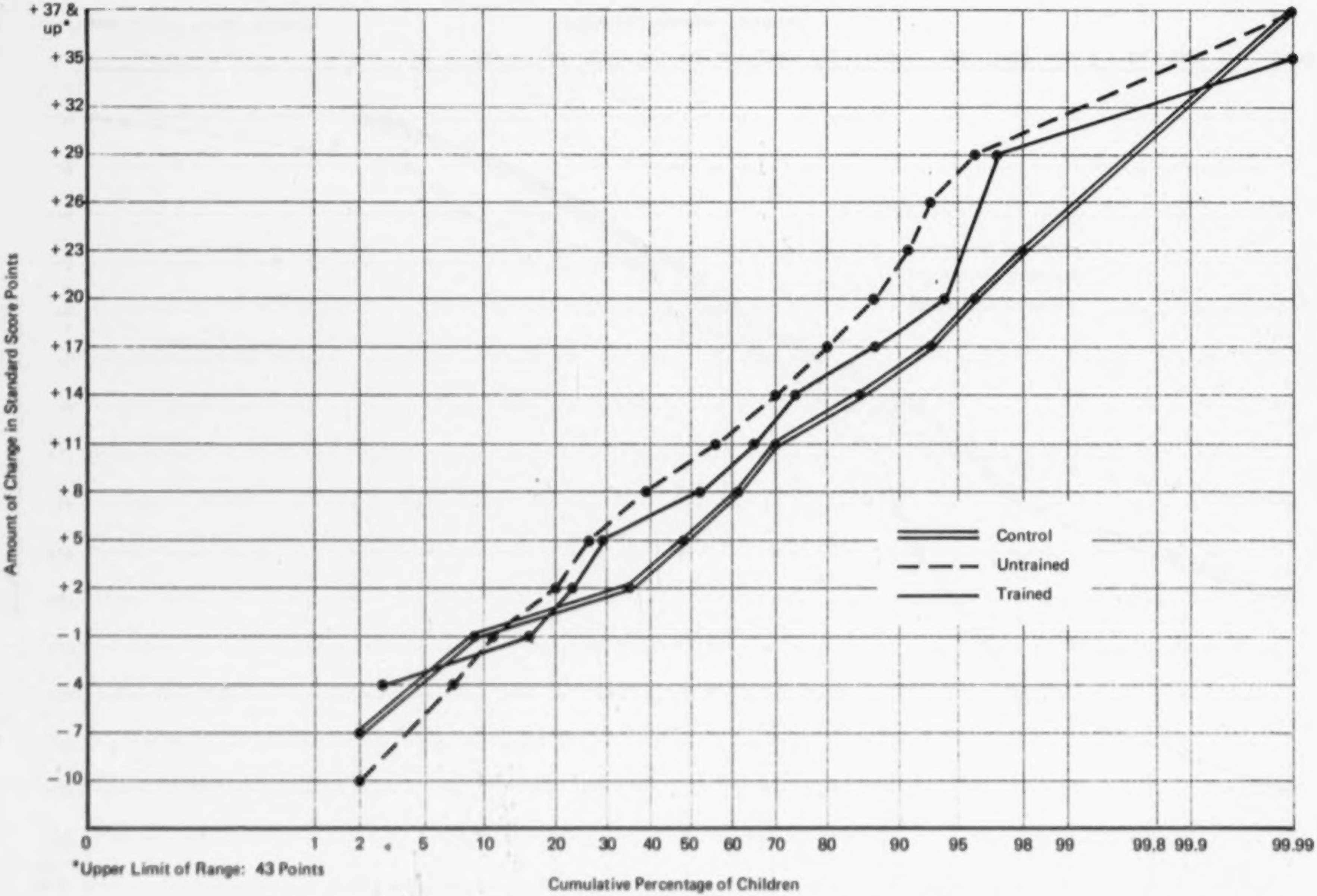
Despite the lack of statistically significant differences, further analysis strongly suggests that the gains were real. ORI made cumulative plots of the percentage distribution of the changes in score of C, U, and T children in each city and for the project as a whole. These plots were converted for clarity to linear graphs (Figures 2.3-2.7) on a probability scale. Each point on a line represents the percentage of children whose scores changed an amount at or below the level indicated by that point. The upward slope of the line is more gradual when the group's increases in score are small; thus the bottom lines on these graphs represents the group that improved least.

Figures 2.3-2.6 show that the tutored and untutored children were two distinct groups in terms of amount of change in WRAT score. From the



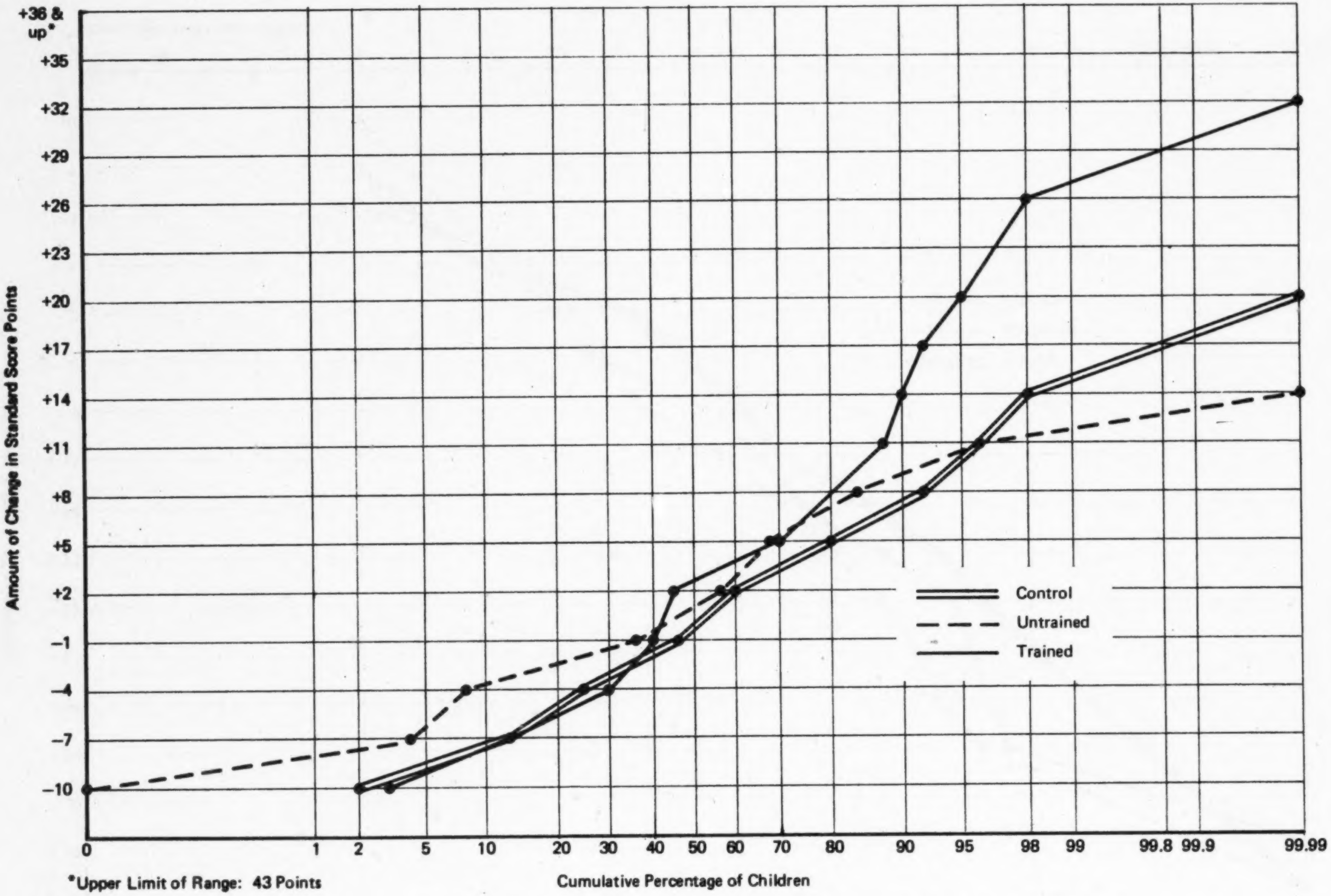
*Upper Limit of Range: 43 Points

FIGURE 2.3. DISTRIBUTION OF CHANGE ON THE WRAT FOR ALL CHILDREN IN DENVER BY, STATUS GROUP



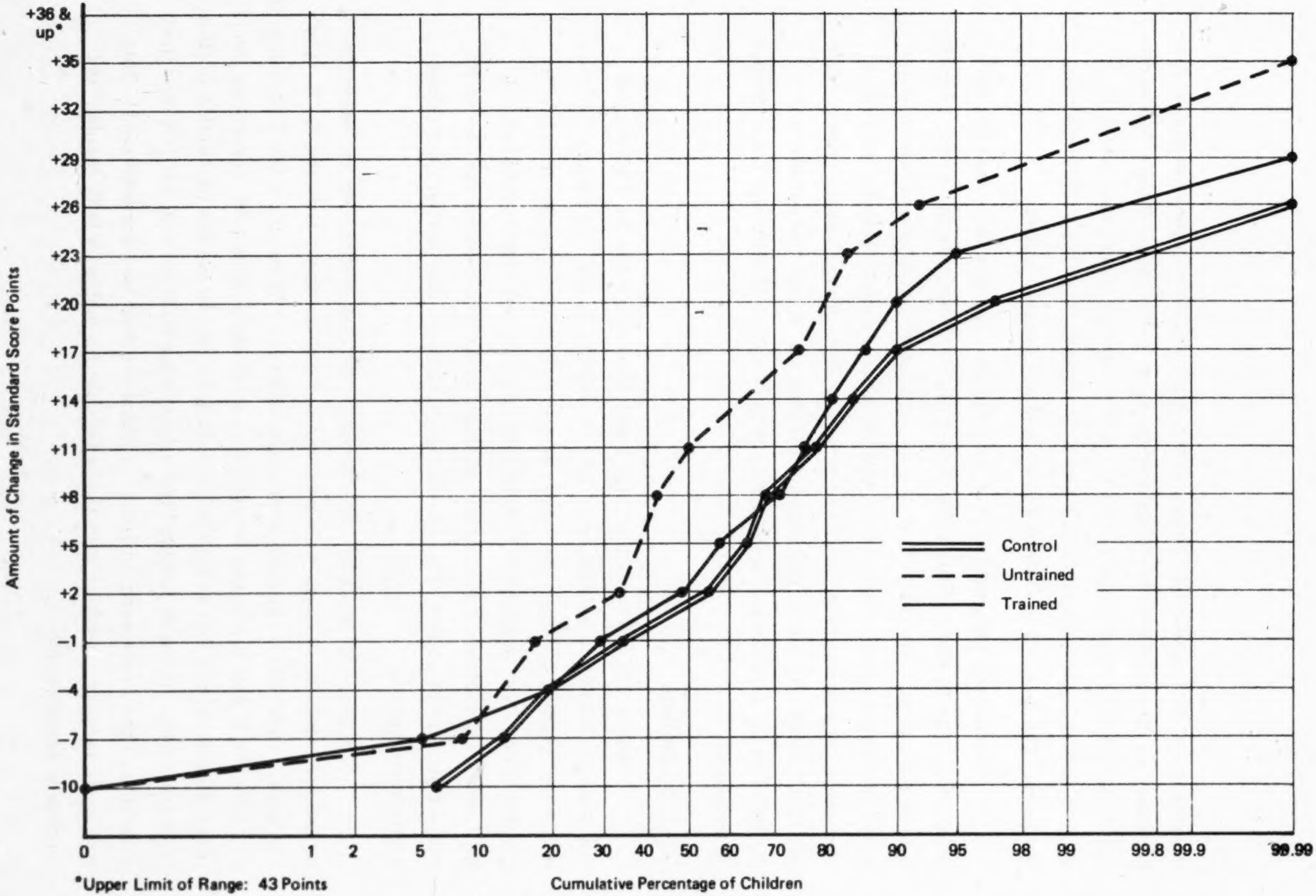
*Upper Limit of Range: 43 Points

FIGURE 2.4. DISTRIBUTION OF CHANGE ON THE WRAT FOR ALL CHILDREN IN OXFORD, BY STATUS GROUP



*Upper Limit of Range: 43 Points

FIGURE 2.5. DISTRIBUTION OF CHANGE ON THE WRAT FOR ALL CHILDREN IN ST. LOUIS, BY STATUS GROUP



*Upper Limit of Range: 43 Points

FIGURE 2.6. DISTRIBUTION OF CHANGE ON THE WRAT FOR ALL CHILDREN IN SAN FRANCISCO, BY STATUS GROUP

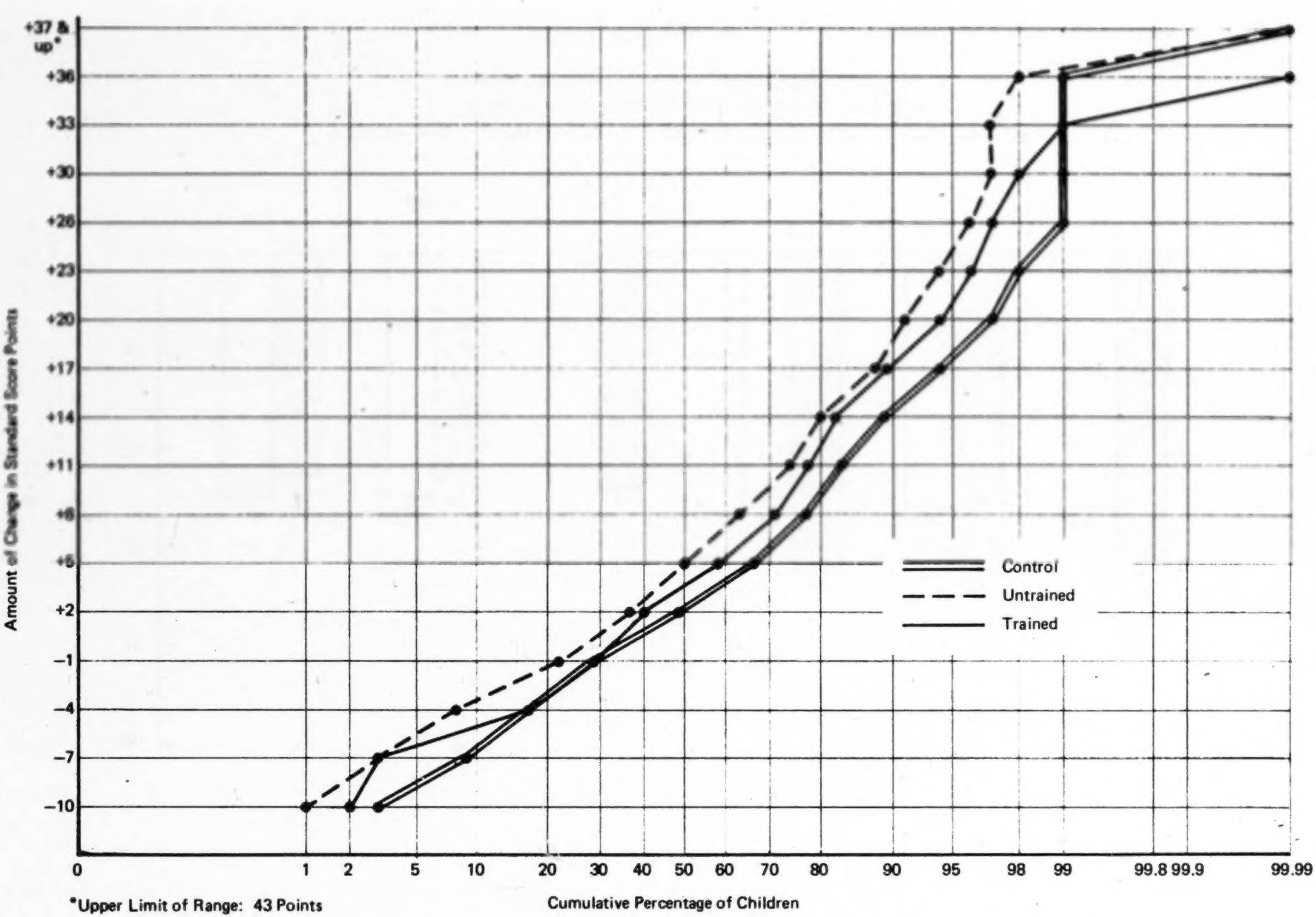
divergence of the curves for tutored and control children, there clearly was a tendency for the former to make greater gains in every city. Figure 2.6 shows the much greater score gains of the U children in San Francisco, while in Denver and St. Louis (Figures 2.3 and 2.5 respectively) the T children take the lead. The U group in Oxford shows slightly greater gains.

Comparing Figures 2.3-2.6 with Figure 2.7, one sees that the patterns of change in each of the individual cities are very similar to the patterns for the project as a whole in that one or both tutored groups consistently diverge from the control group. This leads ORI to conclude that, despite the lack of statistical significance in the differences between groups within cities, tutoring in all locations did in fact make a difference. Since the pattern was repeated in all locations it is reasonable to conclude that it was not a chance occurrence.

The Metropolitan

Figure 2.8 presents the initial and final mean standard scores on the Metropolitan for the children in Oxford and St. Louis. In Volume I of this report ORI pointed out that the format of the Metropolitan series is difficult for young children, particularly those who have visual-motor problems. Children must indicate their answer choices by filling in small spaces on an answer sheet; the scores of the Upswing children on this test are not necessarily trustworthy.

The children in Oxford decreased in reading proficiency as measured by the Metropolitan. There were no meaningful differences between C, U, and T groups. Their mean standard scores declined from 25 to 23 for the T children and to 24 for the C and U groups, which put them in the 2nd and 4th percentile ranks, respectively, at the end of tutoring, whereas all fell in the 8th percentile initially. Thus the Oxford children finished the school year with reading skills lower than over 90% of the first-grade children on whom the test was standardized. This finding is in strong conflict with the WRAT results and with both teacher and volunteer assessments.



*Upper Limit of Range: 43 Points

FIGURE 2.7. DISTRIBUTION OF CHANGE ON THE WRAT FOR ALL CHILDREN BY STATUS GROUP, ALL CITIES

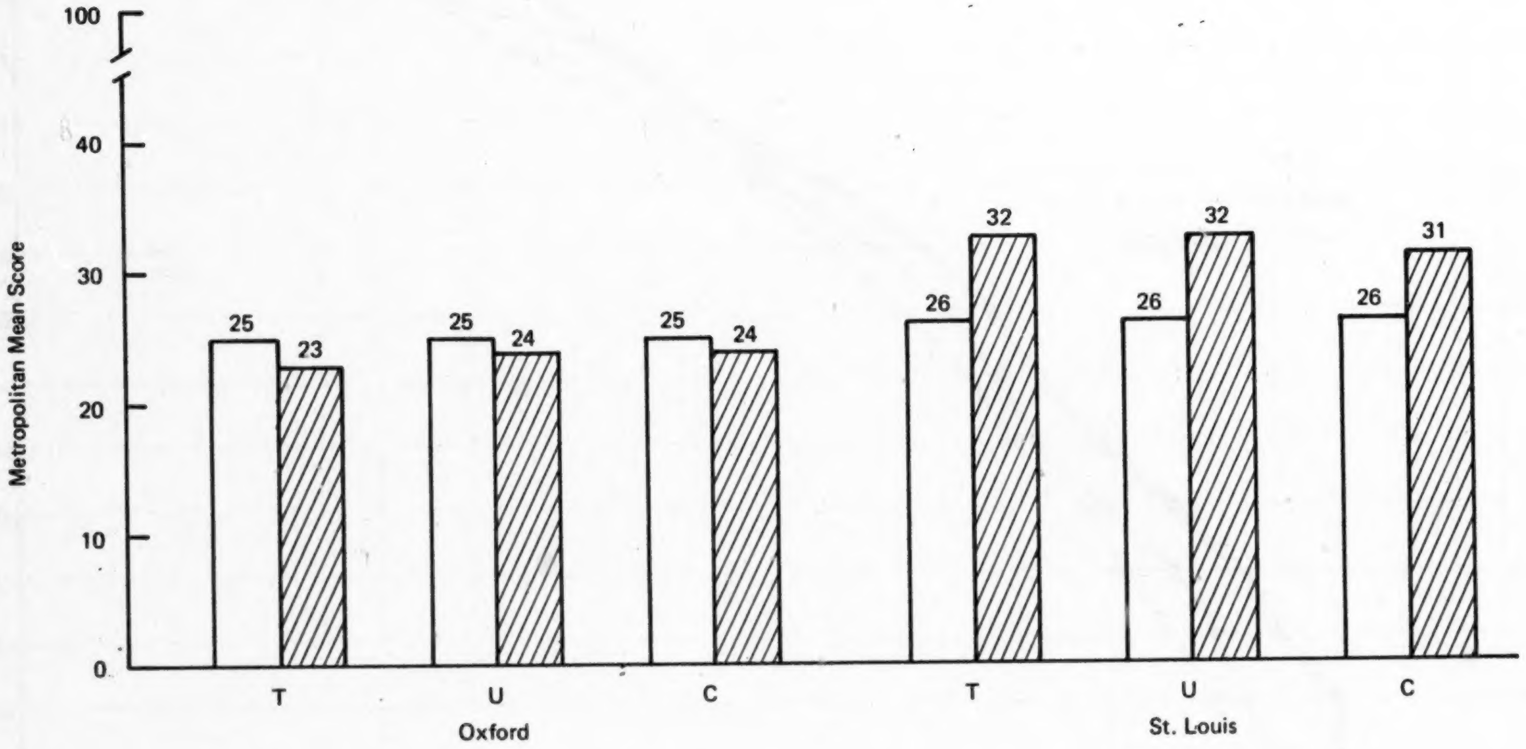


FIGURE 2.8. INITIAL AND FINAL MEAN STANDARD SCORE OF THE METROPOLITAN PRIMER AND PRIMARY TEST FOR OXFORD AND ST. LOUIS, BY STATUS GROUP

St. Louis' population of children did show improvement. The T and U groups increased their mean standard score 6 points and the C group 5 points. In terms of percentile rank, the tutored groups moved from the 12th to the 22nd. However, it is misleading to talk of change in terms of percentiles since at the extremes of the scale a few points in raw or standard score translate into major changes in percentile rank. The percentiles are provided merely as a reference.

VMI

Tutoring apparently had no impact on the children's development of visual-motor integration skills as measured by the VMI. There was no difference in the mean VMI scores of the control and experimental children at the start of tutoring, either for the project as a whole or within any city. As Figure 2.9 indicates, the three groups (C, U, T) had the same mean initial raw score, 10. This converts to a chronological age equivalent of 5 years 6 months for girls and 5 years 7 months for boys. The actual mean age for the total population at that time was 6 years 8 months, with all groups comparable in age distribution. Seventy percent of the children obtained VMI chronological age equivalents below the population's mean actual age.

Also from Figure 2.9, the post-tutoring mean raw score for both the control children and those tutored by trained volunteers was 11, while for children tutored by untrained volunteers it remained 10. The VMI age equivalent for a raw score of 11 is 6 years 0 months for boys and 5 years 11 months for girls. The Upswing child population's (total) mean age at the end of the school year was 7 years 2 months. Thus the final test showed all groups were still well below the norm for their actual ages.

The "T" test affirmed that there were no significant differences in the C, U, and T groups' initial and final mean raw scores or in amount of change over the tutoring period. The distribution in score was of course not normal, but decidedly skewed to the left, indicating no apparent

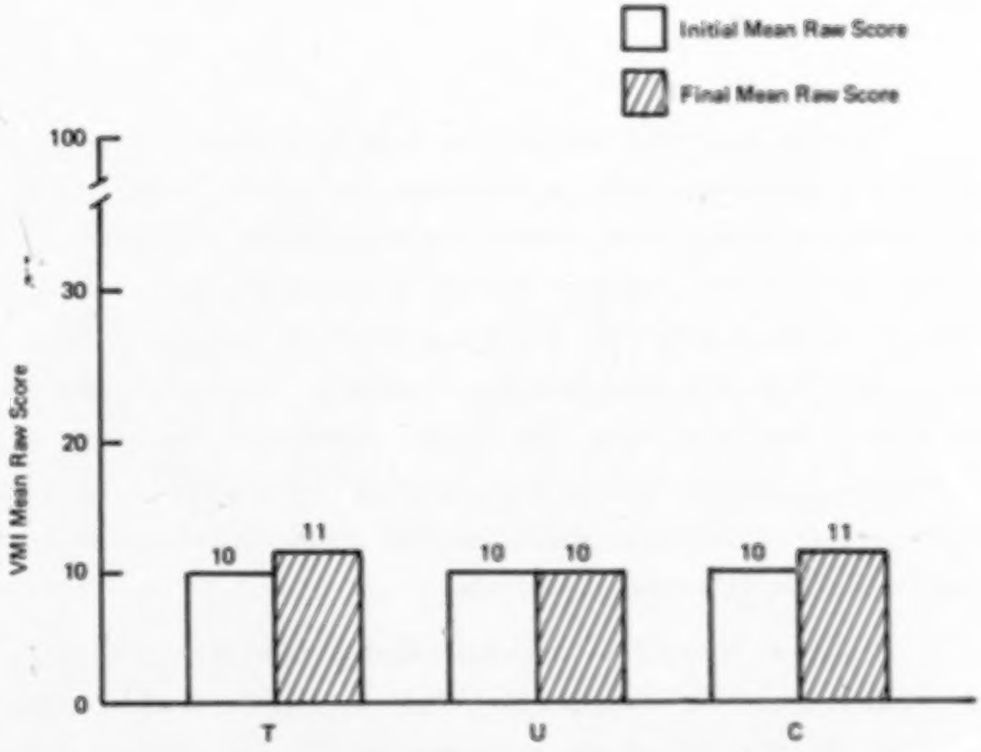


FIGURE 2.9. INITIAL AND FINAL MEAN RAW SCORES ON THE BEERY-BUKTENICA VISUAL MOTOR INTEGRATION TEST, BY STATUS GROUP, ALL CITIES

gains by any of the three groups. The standard deviations of the mean change values for all groups were: C - 2.2, U - 2.1, T - 2.3, reflecting the static nature of the scores. The groups were quite homogenous; no noticeable growth was made by any of them.

These results indicate that children's visual-motor difficulties were not solved simply by their growing older. In fact, if the trend should continue, their visual-motor skills will grow less adequate for the tasks expected of them in school. The data suggest that if Upswing volunteers are to be effective in this area they must be trained differently than they were in the first year. Emphasis on specific remediation techniques is needed. Lack of development in visual-motor integration is not necessarily inconsistent with progress in reading, particularly when the latter is measured by the WRAT, since the WRAT requires only vocal response to visual stimuli. However, visual-motor immaturity does impair development of writing skills. One form of visual-motor remediation might be to teach writing skills. Training in how to do that properly should be given to the volunteers.

RELATIONSHIPS BETWEEN TESTS

There was a significant negative correlation ($r = -.336$) between initial and final WRAT scores. This coefficient means that the initial WRAT explains about 11% of the variation in final WRAT. Since the correlation was negative, there was a tendency for children with lower WRAT scores at the beginning of tutoring to make greater gains over the year.

From Figure 2.2, which shows mean WRAT scores by city and status group of volunteer, Oxford children would seem to have contributed most to this occurrence. It seems likely that the comparatively low starting point of all Oxford groups (T, U, C) could be attributable to lack of school (kindergarten) experience. As noted previously, Oxford does not have public kindergarten, whereas all the other cities do. It appears that simply with exposure (since the control group also did well) the children tended to make significant strides, reaching average reading performance by the end of the school year.

Initial WRAT scores correlated .524 with IQ. Final WRAT scores showed a lower correlation with IQ of .396. The correlation between IQ and change in WRAT score was low and negative (-.085). These data indicate that basic reading skills develop with instruction in a way that bears little or no relation to IQ, at least for children whose IQs are neither very low nor very high. Another point is that the presence of specific learning difficulties would tend to intervene in whatever effects IQ might have on development of reading skills.

Initial VMI scores correlated negatively with the initial WRAT scores (r=-.133). One possible reason for this is that visual-motor integration problems were not the prime causes of the reading difficulties of these Upswing children. This is an unexpected finding, since the groups showed functional immaturity on the VMI, which usually is related to low reading skills. Even more unexpected was a weak negative correlation between initial VMI and Metropolitan scores (r=-.094); we anticipated that the children with visual-motor integration problems would have the greatest difficulty marking the Metropolitan answer sheet. It is likely that test proctors helped such children mark their answer sheets.

As noted earlier, none of the groups of children (T, U, C) made gains in VMI score over the tutoring period. The correlation of initial VMI with final WRAT produced an r of -.093, while the final VMI correlated -.116 with the WRAT. The relationships are increasingly negative. There was no apparent relationship between initial or final VMI and change in WRAT. These results are attributable to lack of change in VMI while gains were made in tested reading skills. Had the children tended to lose ground in VMI, the final correlation would have been more strongly negative. The correlation between the final Metropolitan and VMI scores was high and negative (r=-.354). From this result, one would predict high Metropolitan reading achievement scores for children with poor visual-motor integration skills. However, we believe this outcome is attributable to test-proctor intervention.

CHILDREN INCLUDED IN ANALYSIS OF VOLUNTEER AND TEACHER ASSESSMENTS OF CHANGE

More children are involved in this part of the analysis of tutoring results than were involved in the foregoing test analysis or in the regression analysis that concludes this section. All children whose volunteers and teachers returned final impressions questionnaires are considered. The volunteer assessments involve 222 children, while the teacher assessments involve 251.

As stated earlier in this section, there were 247 children left in the project at the end of the year according to our criterion of tutoring through March 31, 1972. There were a few cases of teacher and/or volunteer returning a form although the volunteer had attrited before March 31. These were included, producing a small discrepancy between number of children remaining and number of children included in this analysis. There also were a few cases of teacher and/or volunteer not returning the form although the child was still in the tutored population. However, the children reported on here are close to 100% of those who received tutoring through March 31, 1972. The response rates were such that the data presented can be considered fully representative of the opinions of the volunteers and teachers associated with the project at the end of the year.

DATA SOURCES

As indicated above, the information for this analysis came from volunteer and teacher responses to a final impressions questionnaire for each group. These forms were distributed in May 1972.

SPECIAL CONSIDERATIONS ABOUT THE DATA

There are no observations of control group children to compare with the observations of tutored children. The questions were worded to focus the respondent's thoughts on the contributions of tutoring, but it is, strictly speaking, not possible to isolate the portions of change observed in the child that were attributable to tutoring as opposed to other influences.

The intent of this part of the analysis is simply to look at the growth of the children through the eyes of the teachers and volunteer tutors. Their assessments provide the only measure of the criterion variable change in self-esteem; no test of self-esteem was included in the test battery. It is clear from the limited data we have, that such a test is necessary for the evaluation. One has been developed for use in the second year of the project.

When interpreting correlations between questionnaire and test data it should be remembered that the correlations were produced from the restricted data base of the multiple regression analysis. The number of children reported on by teachers in their questionnaires was 251 and the number reported on by volunteers was 222; the number of cases involved in the regression was 131, because both complete questionnaire data and complete WRAT data were required for a child to be included in that part of the analysis.

VOLUNTEER AND TEACHER ASSESSMENTS OF CHANGES IN THE CHILDREN

Volunteers Describe Children's Overall Progress

The volunteers generally felt that the children they tutored made better overall progress in school than they would have without Upswing tutoring. Table 2.2 shows that more than a third felt that Upswing brought about major improvements in the overall progress of the children they tutored, while over half saw limited improvement. The total percentage of children in whom improvement was noted is 88%.

Comparison of these data with the distribution of change in WRAT score (Table 2.1, page 2-11) shows that the volunteer assessments of change in overall rate of progress tended to be in line with change in reading as measured by the WRAT. The volunteers found more cases of major gain and fewer cases of no change than did the test, but they undoubtedly were considering aspects

TABLE 2.2

VOLUNTEERS' ASSESSMENT OF PROJECT'S IMPACT ON THEIR PUPILS' OVERALL PROGRESS IN SCHOOL, BY CITY

Assessment of Project Impact on Overall Progress	Denver	Oxford	St. Louis	San Francisco	Total
Tutoring resulted in major improvement	26 40%	24 41%	17 30%	11 26%	78 35%
Tutoring resulted in limited improvement	33 51%	27 46%	33 59%	25 60%	118 53%
Tutoring had no effect	1 1%	0 0%	3 5%	2 5%	6 3%
Don't know	3 5%	7 12%	2 4%	4 9%	16 7%
No response to question	2 3%	1 1%	1 2%	0 0%	4 2%
Total	65 100%	59 100%	56 100%	42 100%	222 100%

of development other than reading. This volunteer assessment correlated .210 with change in WRAT score, while the volunteer assessment of change in reading skills showed no meaningful relationship with change in WRAT score.

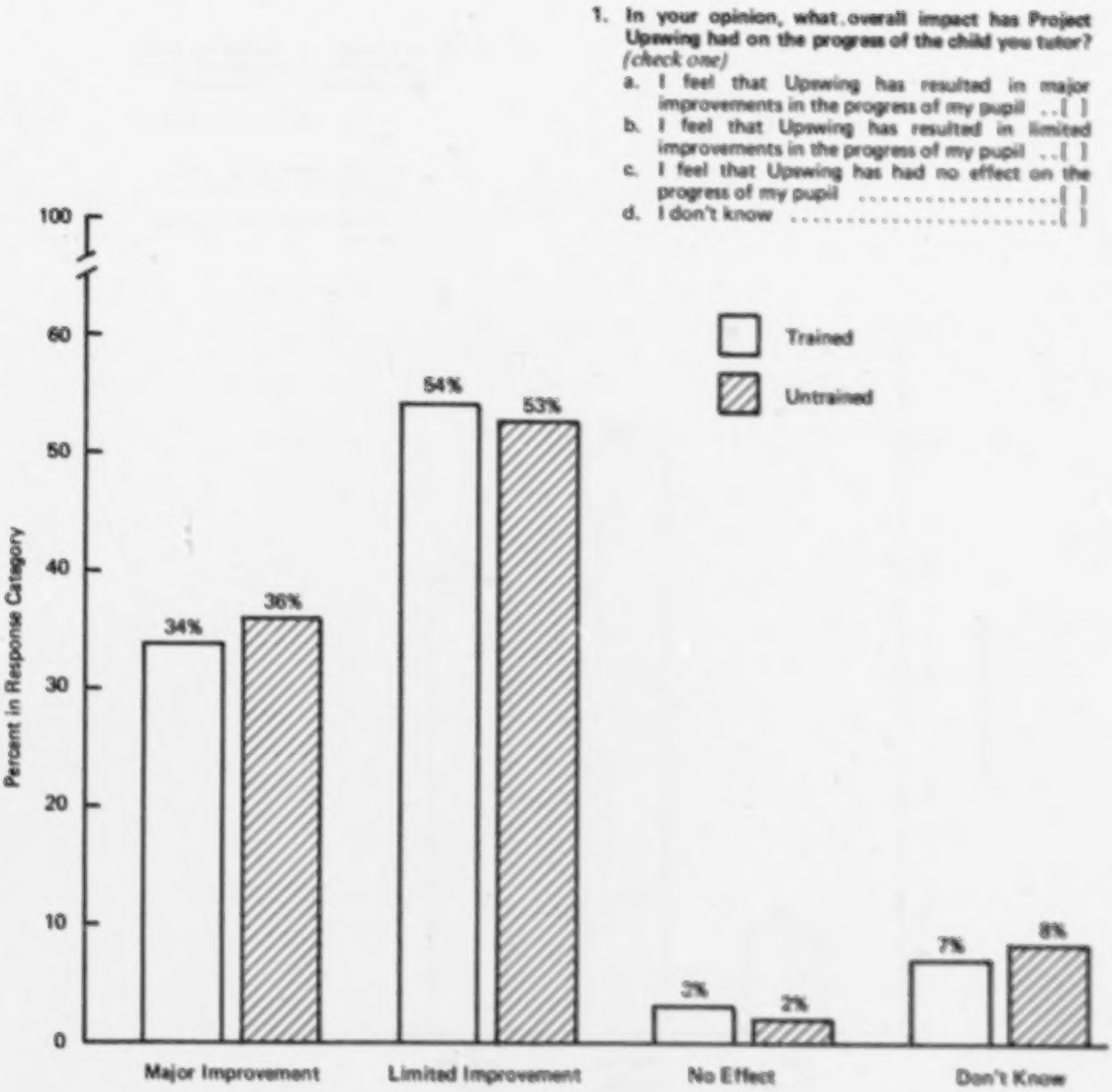
The division of opinion about overall progress among volunteers in different cities was similar (Table 2.2). Denver and Oxford volunteers more often felt tutoring resulted in major improvement and the San Francisco volunteers saw major improvement less often. There was virtually no difference in the assessments given by trained and untrained volunteers, as shown in Figure 2.10.

Teachers Describe Children's Progress Toward Average Grade-Level Achievement

In response to a question similar to the volunteers' overall progress question, teachers found nearly 90% of the children moving toward their average grade-level performance. Of these children, 39% were described as actually "catching up" and 50% as "making progress"; 9% were reported to be losing ground (Figure 2.11).

Table 2.3 has the details. Here San Francisco has the highest percentage (61%) of children observed to be at least "making progress" and the lowest (3%, or one child) observed to be losing ground. Aside from this, the table reflects the consistency that typifies progress evaluation by teachers in the four cities.

Teacher assessments of progress toward grade-level achievement showed no correlation with change in WRAT score. However, this type of assessment did correlate highly with the teacher assessments of change in reading and other language skills (r= .651 and .466, respectively), which did correlate with change in WRAT. This suggests that reading and other language skills were mediating variables, i.e., associated to a degree with both change in WRAT score and teacher assessment of progress toward grade-level achievement. However, both the WRAT and the subjective overall progress assessment evidently involved other variables as well, not in common.



1. **In your opinion, what overall impact has Project Upswing had on the progress of the child you tutor?** *(check one)*
   a. I feel that Upswing has resulted in major improvements in the progress of my pupil . . [ ]
   b. I feel that Upswing has resulted in limited improvements in the progress of my pupil . . [ ]
   c. I feel that Upswing has had no effect on the progress of my pupil . . . . [ ]
   d. I don't know . . . . [ ]

FIGURE 2.10. TRAINED AND UNTRAINED VOLUNTEERS' ASSESSMENTS OF PROJECT'S OVERALL IMPACT ON THEIR PUPILS' PROGRESS IN SCHOOL
(Nonresponse to question: 2% trained, 1% un[illegible]ned.)

6. How would you describe the child's overall progress (all subjects) toward average grade level achievement?

a. Child seems to be losing ground

b. Child seems to be making progress but not catching up

c. Child seems to be catching up

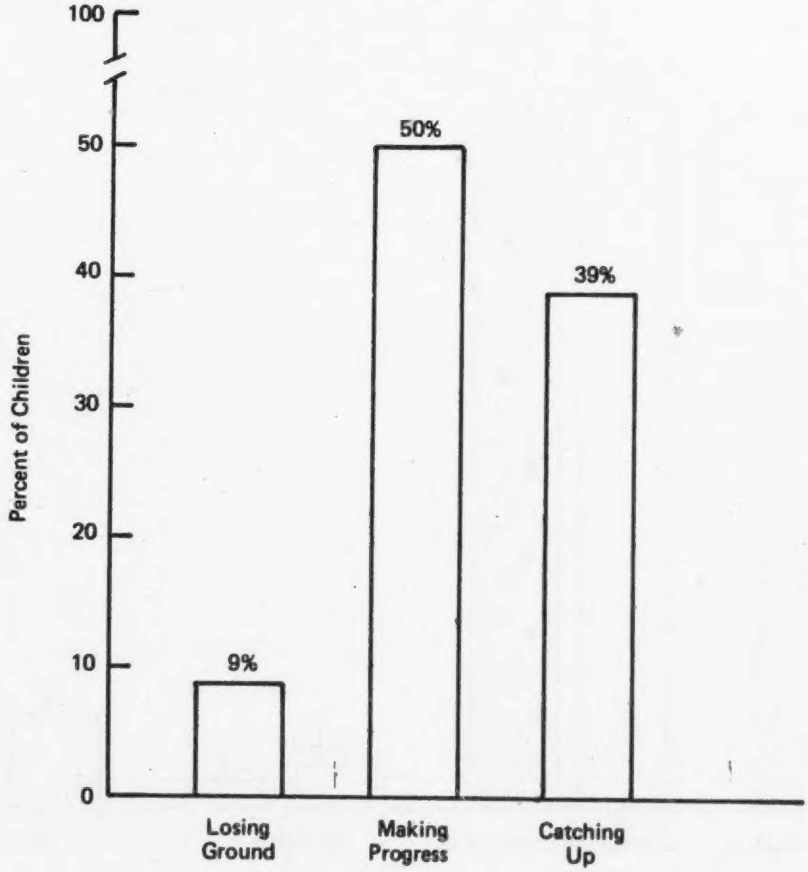


FIGURE 2.11. TEACHER ASSESSMENT OF CHILDREN'S PROGRESS TOWARD GRADE-LEVEL ACHIEVEMENT, ALL CITIES (Nonresponse to question: 2%.)

TABLE 2.3

TEACHER ASSESSMENT OF CHILDREN'S OVERALL PROGRESS TOWARD AVERAGE GRADE LEVEL ACHIEVEMENT, BY CITY

Overall Progress	Denver	Oxford	St. Louis	San Francisco	Total
Losing ground	5 7%	9 12%	7 10%	1 3%	22 9%
Making progress	41 53%	36 49%	29 42%	19 61%	125 50%
Catching up	27 35%	29 39%	32 46%	11 36%	99 39%
No response to question	4 5%	0 0%	1 1%	0 0%	5 2%
Total	77 100%	74 100%	69 100%	31 100%	251 100%

Volunteers Describe Development of Reading Skills

The data on change in reading skills are composites of volunteers' assessment of specific skill components—ability to sound out new words, ability to understand what is read, and ability to read with expression.

The total column in Table 2.4 shows that 40% of the volunteers believed their pupils made some improvement in reading proficiency during the tutoring period, while about 20% considered their pupils to have made major improvement. From the analysis of WRAT results, which suggested gains by about 80% of the tutored children, this is a conservative estimate. The WRAT standard scores of only 18% of the tutored children declined over the tutoring period, showing they made no progress or lost ground. About a quarter of all tutored children increased their WRAT scores enough to move up one category or more in performance level. (See WRAT analysis, page 2-10.) This discrepancy probably was caused partly by the fact that the WRAT measures sight vocabulary and decoding skill, while the composite volunteer assessment of changed reading proficiency included comprehension skills.

Going back to the analysis of volunteer assessments of overall progress, volunteers apparently felt freer to note more generalized gains. There was a fairly good correspondence between those assessments and WRAT results. It is also likely that the WRAT, because it is administered individually, would pick up some of the not-strictly-reading gains that the volunteers were considering in their generalized assessments. For example, a child's increased self-confidence in personal interaction and ability to understand oral instructions should influence his performance both in tutoring and on the WRAT.

Table 2.4 shows some city difference in volunteer assessment of change in reading skills. Oxford and San Francisco volunteers tended to be more conservative, noting improvement in the reading proficiency of, respectively, 54% and 61% of the children ("some improvement" and "major improvement" combined) versus 71% and 61% in Denver and St. Louis. These differences

TABLE 2.4

VOLUNTEERS' ASSESSMENT OF CHANGE IN THEIR PUPILS' READING SKILLS, BY CITY

(Averages of assessments given for specific subskills.)

Assessment of Change	Denver	Oxford	St. Louis	San Francisco	Total
Not applicable to child at this time	5 7%	7 12%	11 20%	7 16%	30 14%
No change observed	12 19%	18 30%	8 15%	13 32%	51 23%
Some improvement observed	31 48%	20 34%	21 36%	17 41%	89 40%
Major improvement observed	15 23%	12 20%	14 25%	4 9%	45 20%
No response to question	2 3%	2 4%	2 4%	1 2%	7 3%
Total	65 100%	59 100%	56 100%	42 100%	222 100%

probably relate to language barriers between volunteers and children (see Section III, Table 3.12) that affected not so much the children's progress as the volunteers' perceptions of progress. Trained and untrained volunteers' assessments of change in reading skills are compared in Figure 2.12. No meaningful differences appear.

Teachers Describe Development of Reading Skills

Like the volunteers, teachers tended to note less progress when asked about specific skills. Teachers believed that about 70% of Upswing's child enrollees showed improvement in reading skills that was attributable to tutoring (compared with 90% considered to be making progress toward grade-level achievement). As shown in Figure 2.13, the teachers described 29% of the children as making "major improvement" and another 41% as making "some improvement" in their reading skills. They detected no gains (attributable to Upswing) in 24% of the students and found the reading skills of 2% of the children lower than before.

A more detailed picture of this information is available in Table 2.5. There it is shown that, in the main, teachers in all cities made quite similar assessments of improvements in reading skills as a result of Upswing tutoring. Only St. Louis teachers described children as having lost ground at the end of the tutoring program. They saw a decline in the skills of six children, which accounts for the 2% in the "skill lower" category of Figure 2.13 depicting all children on whom teachers reported. Because of the way the questionnaire item was worded, these teachers evidently believed the tutorial program contributed to those six students' lower performance.

Teacher assessments of change in reading skills correlated positively with change in WRAT score (r = .164). Since the correlation coefficient is low, teacher and test were by no means always in accord about which children improved and how much they improved. Still the two sets of data can be said to support each other.

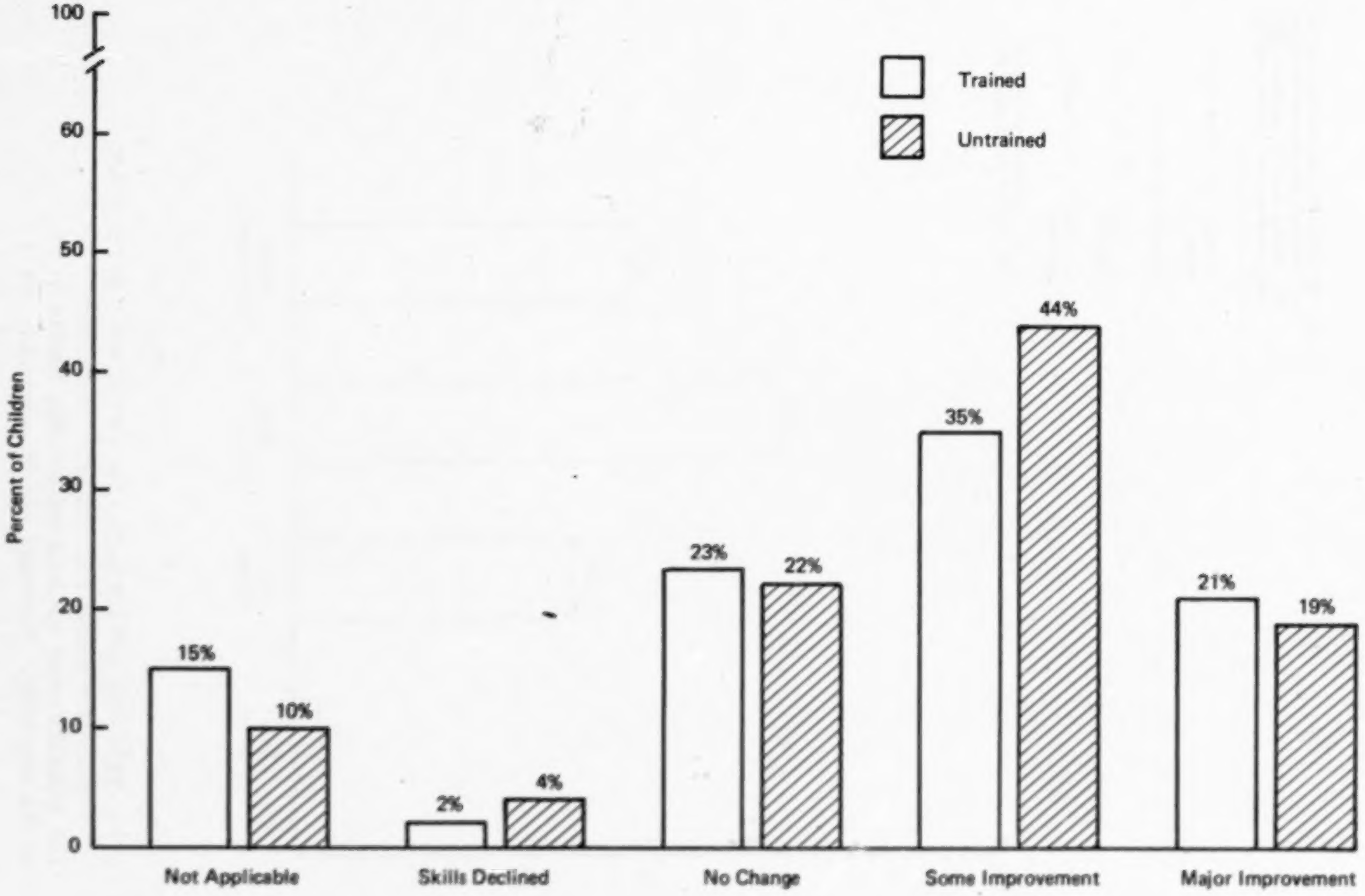


FIGURE 2.12. TRAINED AND UNTRAINED VOLUNTEERS' ASSESSMENTS OF CHANGE IN THEIR PUPILS' READING SKILLS, ALL CITIES
(Averages of assessments given for specific subskills.
Combined nonresponse: 4% trained, 2% untrained.)

3. What effect has Upswing tutoring had on the child's development in reading (e.g., ability to sound out new words, understanding what he reads, reading with expression, etc.)?

a. Child's level of skill, overall, seems lower

b. No change observed

c. Some improvement observed

d. Major improvement observed

e. Not applicable to child at this stage of his development

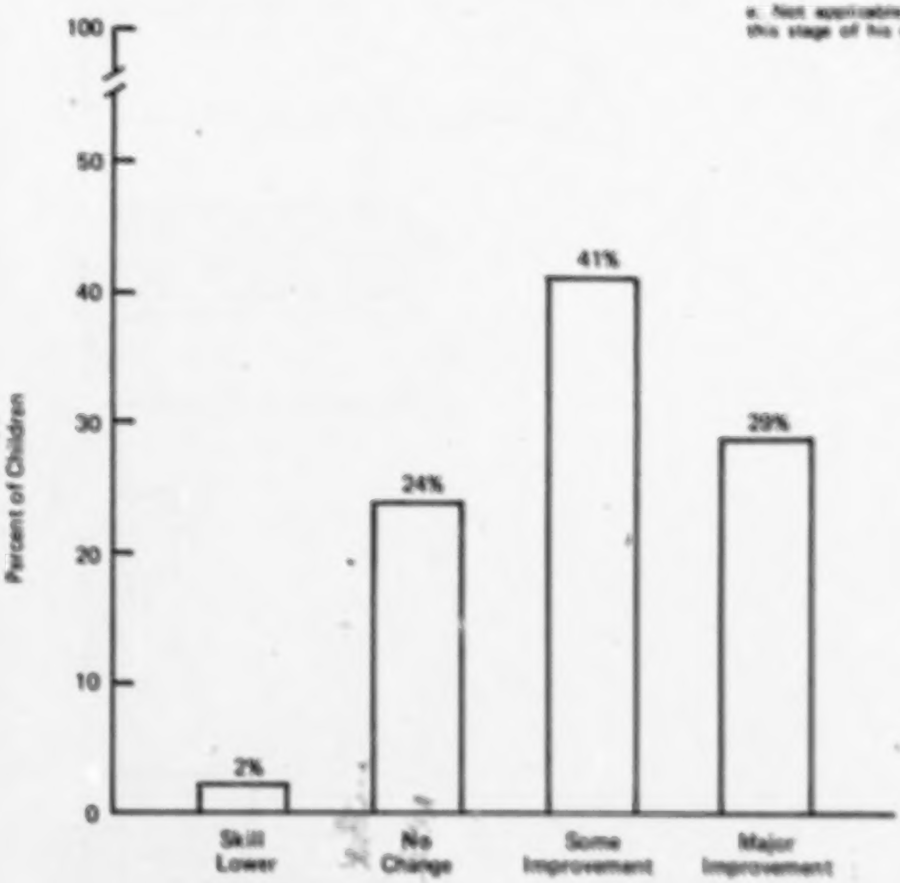


FIGURE 2.13. TEACHER ASSESSMENT OF UPSWING'S EFFECT ON CHILDREN'S READING SKILLS, ALL CITIES
(The question was considered not applicable to 3% of the children. Nonresponse to question: 1%.)

TABLE 2.5

TEACHER ASSESSMENT OF UPSWING'S EFFECT ON CHILDREN'S READING SKILLS, BY CITY

Effect on Reading	Denver	Oxford	St. Louis	San Francisco	Total
Skill lower	0 0%	0 0%	6 9%	0 0%	6 2%
No change	16 21%	19 26%	18 26%	7 23%	60 24%
Some improvement	34 44%	31 42%	23 33%	14 45%	102 41%
Major improvement	24 31%	20 27%	20 29%	10 32%	74 29%
Not applicable	1 1%	4 5%	2 3%	0 0%	7 3%
No response to question	2 3%	0 0%	0 0%	0 0%	2 1%
Total	77 100%	74 100%	69 100%	31 100%	251 100%

Comparing volunteer and teacher assessments, the teachers tended to detect fewer gains in reading than the WRAT, but slightly more than the volunteers based on the composite. The teacher assessment was generalized (i.e., teachers were not asked to judge subskills such as ability to sound out new words). ORI believes this may be the main reason for the difference between their observations and the volunteers'. This assumption is borne out by the fact that, although the volunteers' specific assessment of change in reading and language skills did not correlate with the corresponding teacher assessments, the volunteer assessment of overall progress did (.307 with reading and .222 with language). Another possible factor is that many volunteers — in interviews with ORI, on questionnaires, and in comments to teachers and city project staff — showed hesitance about making specific claims for the effects of tutoring. Sometimes this hesitance appeared to result from not wanting to appear boastful; in other cases it seemed that volunteers may have expected more dramatic gains than are reasonable in most cases.

Volunteers Describe Development of Language Skills

Volunteers noted improved language skills somewhat more commonly than improved reading skills. Table 2.6 (total column) shows that 57% of the volunteers noted some improvement in their pupils' language skills other than reading, and 15% noted major improvement, for a total of 72% progress. Table 2.6 presents mean percentage of progress noted based on assessments of three subskills that call for different criteria based on what can be expected of an Upswing-age child. The more advanced skills deflated the assessments of progress. It is clear, however, that volunteers believed more growth occurred in speaking vocabulary, ability to express ideas clearly, and ability to understand through listening than occurred in reading proficiency. Since one-to-one tutoring allows a unique opportunity for children to practice oral language skills, with no special expertise required of the tutor, it is quite likely that significant growth occurred in that area, and greater growth than occurred in reading. It is unfortunate that we do not have an objective

TABLE 2.6

VOLUNTEERS' ASSESSMENT OF CHANGE IN THEIR PUPILS' LANGUAGE SKILLS, BY CITY

(Averages of assessments given for specific subskills.)

Assessment of Change	Denver	Oxford	St. Louis	San Francisco	Total
Not applicable to child at this time	4 6%	3 5%	4 8%	1 3%	12 5%
No change observed	10 15%	14 23%	10 17%	9 22%	43 19%
Some improvement observed	37 57%	31 53%	31 55%	26 62%	125 57%
Major improvement observed	11 17%	9 15%	8 15%	5 12%	33 15%
No response to question	3 5%	2 4%	3 5%	1 1%	9 4%
Total	65 100%	59 100%	56 100%	42 100%	222 100%

measure of oral language development, since it is at least as important as reading to a child's success in later life if not in school.

Table 2.6 shows no significant differences in the assessments of volunteers from different cities. As noted earlier, Oxford and San Francisco volunteers tended to find that fewer children made progress in reading. ORI believes that this is related to the language barriers discussed in Section III, pages 3-43. We hypothesize that since language was a primary concern in cases where volunteers felt there was a barrier, they tended to focus on language development more than reading in tutoring and also tended to note more growth in language skills, which are commonly considered prerequisite to reading skills (although in fact they may not be).

Trained and untrained volunteers' assessments of language skill development over the tutoring period are compared in Figure 2.14. Again, as with reading, training status apparently had nothing to do with pupil progress, or with what the volunteers thought about pupil progress.

Teachers Describe Development of Language Skills Other Than Reading

According to the teachers, Project Upswing helped 60% of the children improve their language skills. Figure 2.15 shows that about 20% were observed to make major improvement in speaking vocabulary and ability to express ideas clearly and 41% to make "some improvement" in those areas as a result of Upswing tutoring. No change attributable to tutoring was noted in 37% of the children.

Comparing Figures 2.13 and 2.15, one finds that the teachers tended to observe improvement in reading skills more often than improvement in oral communication skills. The difference is not great, however, and the difficulty in human measurement involved should be considered here: it is hard to perceive a real shift in a child's capability for oral expression over a year's time. Excepting those children who have undergone obviously great changes, this

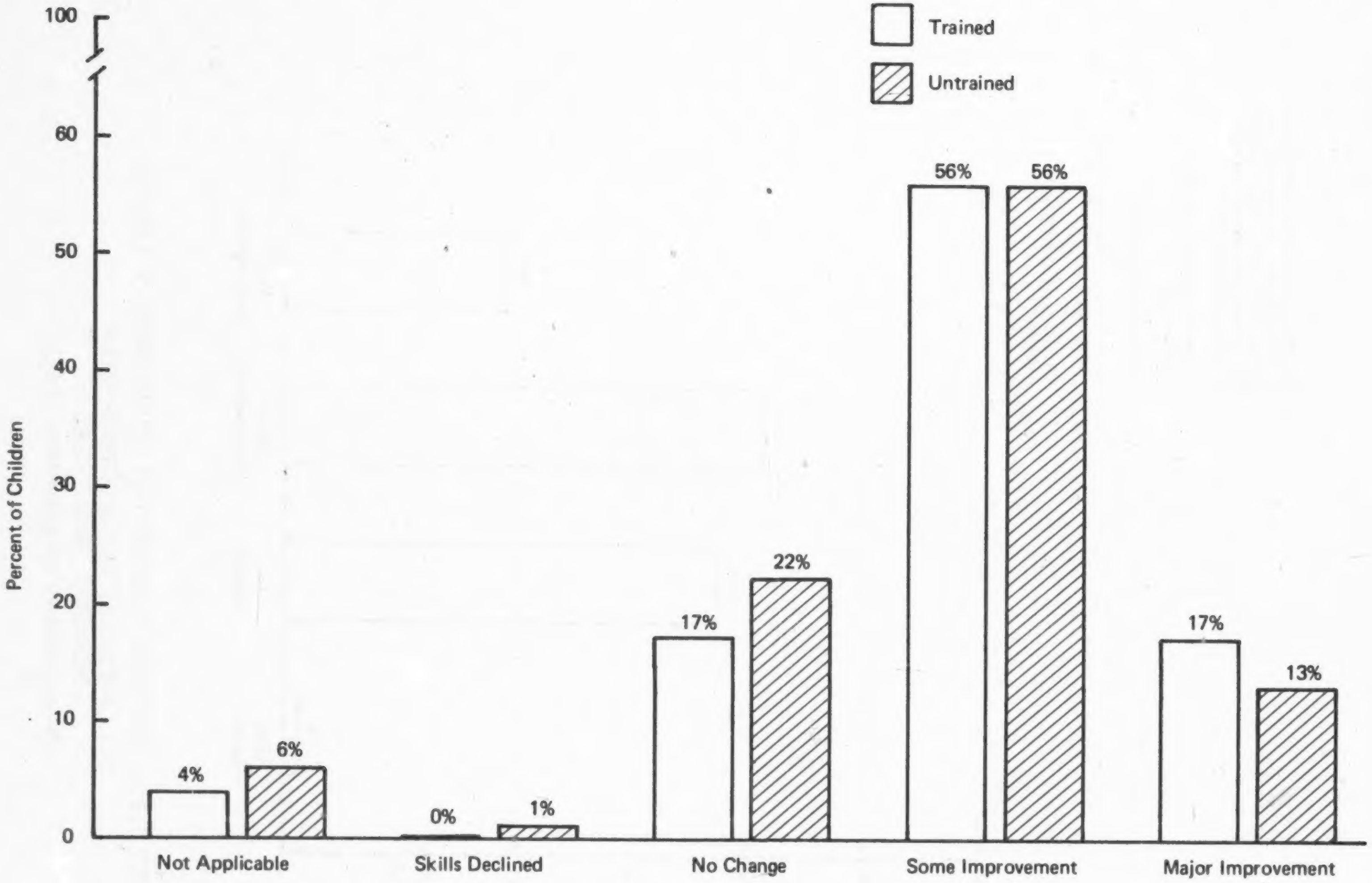


FIGURE 2.14. TRAINED AND UNTRAINED VOLUNTEERS' ASSESSMENT OF CHANGE IN THEIR PUPILS' LANGUAGE SKILLS, ALL CITIES
(Averages of assessments given for specific subskills.
Combined nonresponse: 6% trained, 2% untrained.)

4. What effect has Upswing tutoring had on the child's development in language skills other than reading (e.g., speaking vocabulary, ability to express ideas clearly, etc.)?

a. Child's level of skill, overall, seems lower

b. No change observed

c. Some improvement observed

d. Major improvement observed

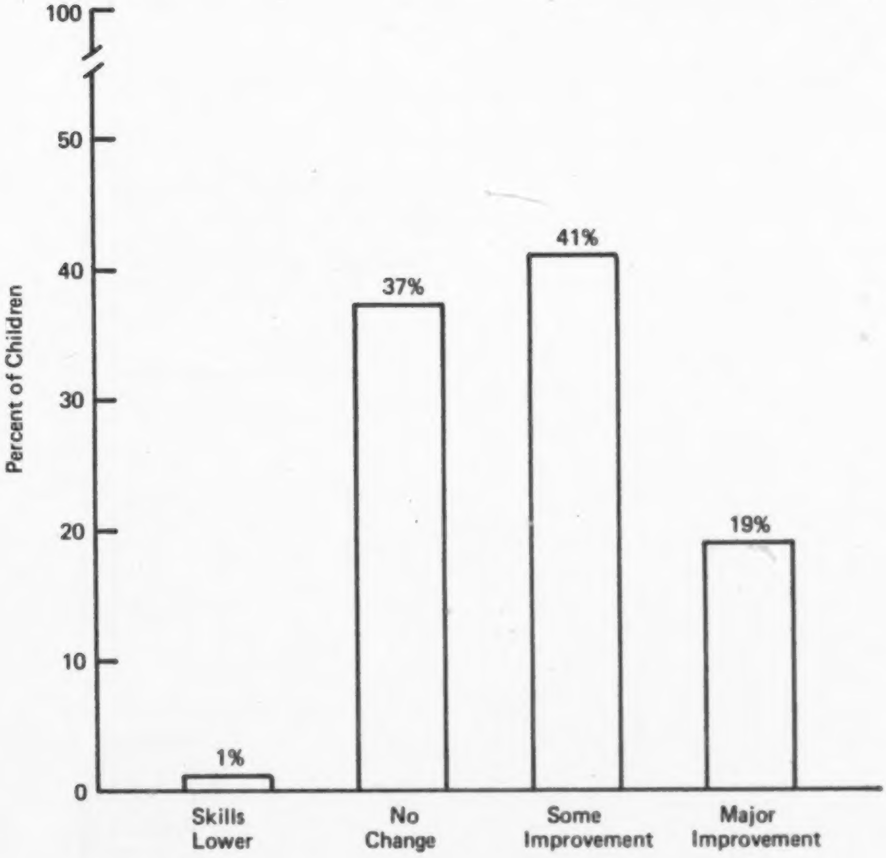


FIGURE 2.15. TEACHER ASSESSMENT OF UPSWING'S EFFECT ON LANGUAGE SKILLS OTHER THAN READING, ALL CITIES
(Nonresponse to question: 2%.)

kind of assessment would be a borderline judgment. It is easier to take a tangible measure of reading skills.

Comparison of Tables 2.5 and 2.7 prompts another kind of speculation on this point. The percentage of Oxford children in whom no change in language skills was observed is almost twice the percentage in whom no change in reading skills was observed. Most of Oxford's Upswing children were from rural areas. Experiencing different language patterns at school and home may have impeded their development of language skills. Another possibility is that development of language skills went unoticed or was discounted because children's vocabulary and syntax did not conform to standard English. In any case, ORI does not want to make too much of this point. The correlation between teacher assessments of reading and of language skills yielded a high r value (.573), indicating that reading and language skills, or the teachers assessments of them, tended to go up together.

As Table 2.7 depicts, the city patterns of responses from teachers on change in language skills attributable to tutoring were quite similar, with the possibility of some real difference in Oxford, where the lowest percentage (15%) in the "major improvement" category was recorded, and in Denver, where the lowest percentage (30%) in the "no change" category was recorded.

Interestingly, although the volunteers tended to see less improvement in reading (Table 2.4) than did teachers, they tended to see more improvement in oral language skills (Table 2.6) than did teachers. This is reasonable considering the greater opportunity for a child to develop and demonstrate oral skills in a one-to-one relationship.

The volunteer assessments of change in reading and language skills showed little or no relationship to change in reading as measured by the WRAT ($r = .090$), while the teacher assessments did ($r = .164$). The former correlation was made between point change in WRAT score and a composite score based on values assigned the volunteers' assessments of both reading and

TABLE 2.7

TEACHER ASSESSMENT OF UPSWING'S EFFECT ON CHILDREN'S LANGUAGE SKILLS OTHER THAN READING, BY CITY

Language Skills	Denver	Oxford	St. Louis	San Francisco	Total
Skill lower	0 0%	0 0%	1 1%	1 3%	2 1%
No change	23 30%	32 44%	25 37%	12 39%	92 37%
Some improvement	36 47%	30 41%	26 38%	10 32%	102 41%
Major improvement	14 18%	11 15%	16 23%	8 25%	49 19%
No response to question	4 5%	0 0%	1 1%	0 0%	5 2%
Total	77 100%	74 100%	69 100%	31 100%	251 100%

language subskills. The composite score was of course weakened in the same way as the composite percentages given in Tables 2.4 and 2.6 and Figures 2.12 and 2.14.

Volunteers Describe Change in Self-Esteem

One of the hypotheses of Project Upswing is that a child's actual academic success is related to his own estimate of his success in school, along with a sense of control of his environment. These attributes were labeled self-esteem. A further hypothesis is that tutors can positively affect children's level of self-esteem. The Upswing data support both of these hypotheses.

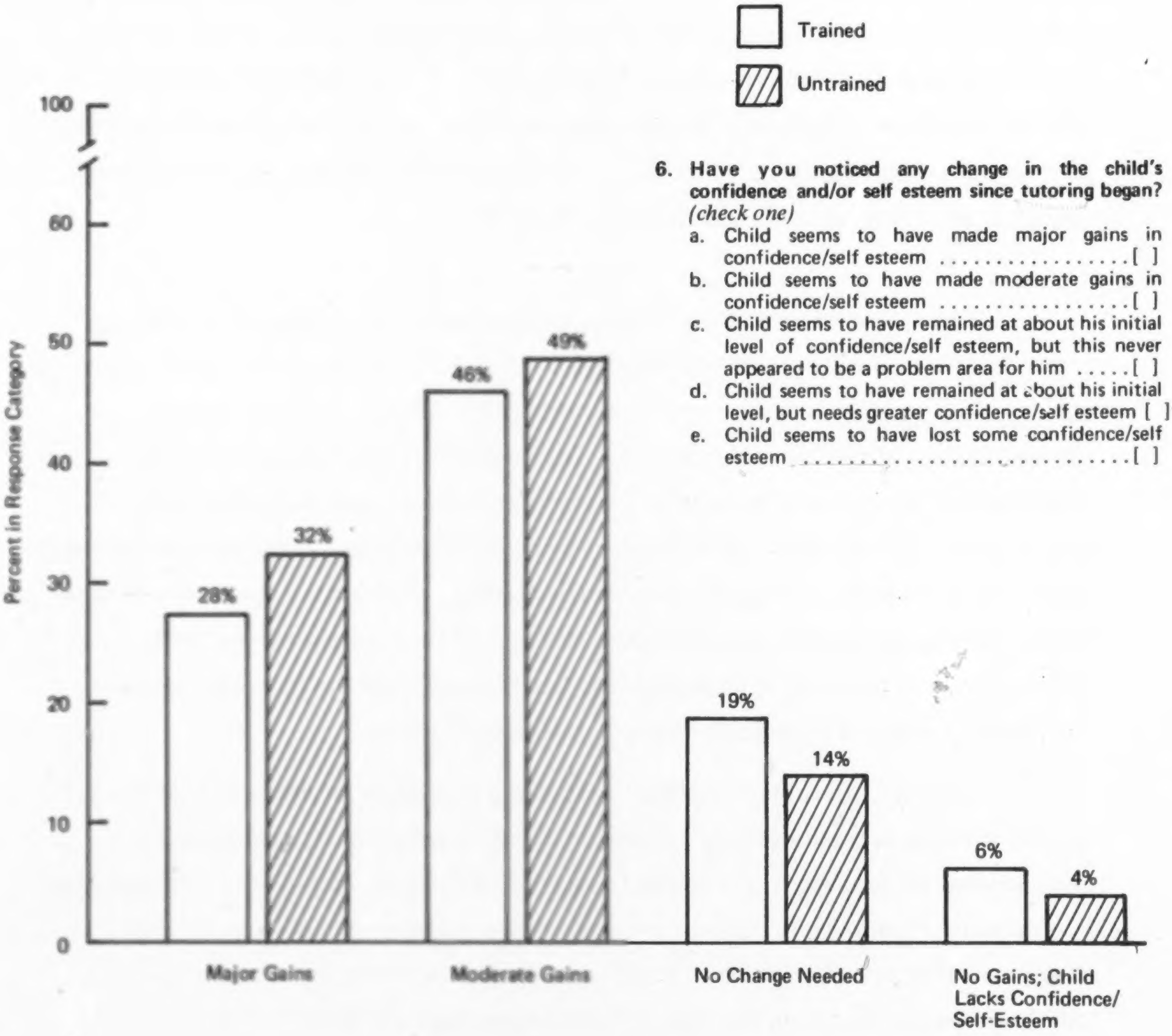
A little over three-quarters of all the volunteers (trained and untrained) felt the children made moderate gains or better in their level of self-esteem. In Table 2.8, the percentages of volunteers who noted "moderate gains" and "major gains" combine for a total of 77%; 17% of the children were believed never to have had self-esteem problems. Only 5% of the children were found to make no gains although they needed to improve their self-esteem.

Surveying the cities separately the response patterns are reasonably similar. The most important points to be made are that roughly 80% or more of the children in all locations were considered by their volunteer tutors to have self-esteem problems when tutoring began and 70% to 80% in all locations were observed to make gains (moderate and major) over the tutoring period. Figure 2.16 serves to separate and compare the opinions of trained and untrained volunteers about changes in their pupil's self-esteem. Here the untrained volunteers are seen to have noted gains more often then the trained volunteers. However, the differences are too slight to suggest any significant trend.

TABLE 2.8

VOLUNTEERS' ASSESSMENT OF CHANGE IN THEIR PUPILS' CONFIDENCE/SELF-ESTEEM, BY CITY

Assessment of Change	Denver	Oxford	St. Louis	San Francisco	Total
Major gains	21 32%	17 29%	20 36%	9 22%	67 30%
Moderate gains	32 49%	31 52%	21 37%	21 50%	105 47%
No change needed	12 19%	6 10%	13 23%	6 14%	37 17%
No change observed; child lacks confidence/self-esteem	0 0%	4 7%	2 4%	5 12%	11 5%
No response to question	0 0%	1 2%	0 0%	1 2%	2 1%
Total	65 100%	59 100%	59 100%	42 100%	222 100%



6. Have you noticed any change in the child's confidence and/or self esteem since tutoring began? *(check one)*

a. Child seems to have made major gains in confidence/self esteem ....[ ]
b. Child seems to have made moderate gains in confidence/self esteem ....[ ]
c. Child seems to have remained at about his initial level of confidence/self esteem, but this never appeared to be a problem area for him .....[ ]
d. Child seems to have remained at about his initial level, but needs greater confidence/self esteem [ ]
e. Child seems to have lost some confidence/self esteem ....[ ]

FIGURE 2.16. TRAINED AND UNTRAINED VOLUNTEERS' ASSESSMENT OF CHANGE IN THEIR PUPILS' CONFIDENCE/SELF-ESTEEM (No volunteers thought their pupil's self-esteem decreased. Nonresponse to question: 1% trained, 1% untrained)

Teachers Describe Change in Self-Esteem

When the teachers were queried about changes in the children's level of self-esteem, they indicated that about half of the children reported on made gains in this area. Figure 2.17 shows that of the 50% who showed improvement, 26% made moderate gains and 24%, major gains. A quarter of the child population did not appear to have self-esteem problems according to their teachers. The other quarter was described as having esteem problems and not showing any signs of change. In the detailed breakdown of responses (Table 2.9), there are no outstanding differences.

Thus, teachers and volunteers gave similar assessments of the rate of low self-esteem among the children when tutoring began. This kind of problem seems to have been rampant, affecting about 75% of the tutored children in all locations. However, the teachers and volunteers did not give similar assessments about the rate of improvement; the volunteers indicated that 20% to 30% more children made gains. Nor did teacher and volunteer necessarily agree about whether a specific child made gains. Correlating the two assessments yielded no meaningful relationship (r = .011). Apparently children who demonstrated growing confidence in the one-to-one tutoring situation did not necessarily carry it with them into the classroom group.

Another interesting finding is that the volunteer assessment of change in self-esteem correlated with change in WRAT score—i.e., as children's self-esteem increased, their WRAT reading performance increased. The teacher assessment of change in self-esteem did not correlate with change in WRAT. It appears that manifestations of self-esteem that surface in tutoring do influence performance on the individually-administered WRAT.

Volunteers Describe Children's Readiness to Communicate

Children's willingness to express themselves orally is commonly associated with level of self-esteem, and the Upswing volunteers' assessments

7. **What change, if any, in the child's confidence and/or self esteem have you noticed since tutoring began?**

   a. Child seems to have made major gains in confidence/self esteem

   b. Child seems to have made moderate gains in confidence/self esteem

   c. Child seems to have remained at about his initial level, but this never appeared to be a problem area for him

   d. Child seems to have remained at about his initial level, but needs greater confidence/self esteem

   e. Child seems to have lost some confidence/self esteem

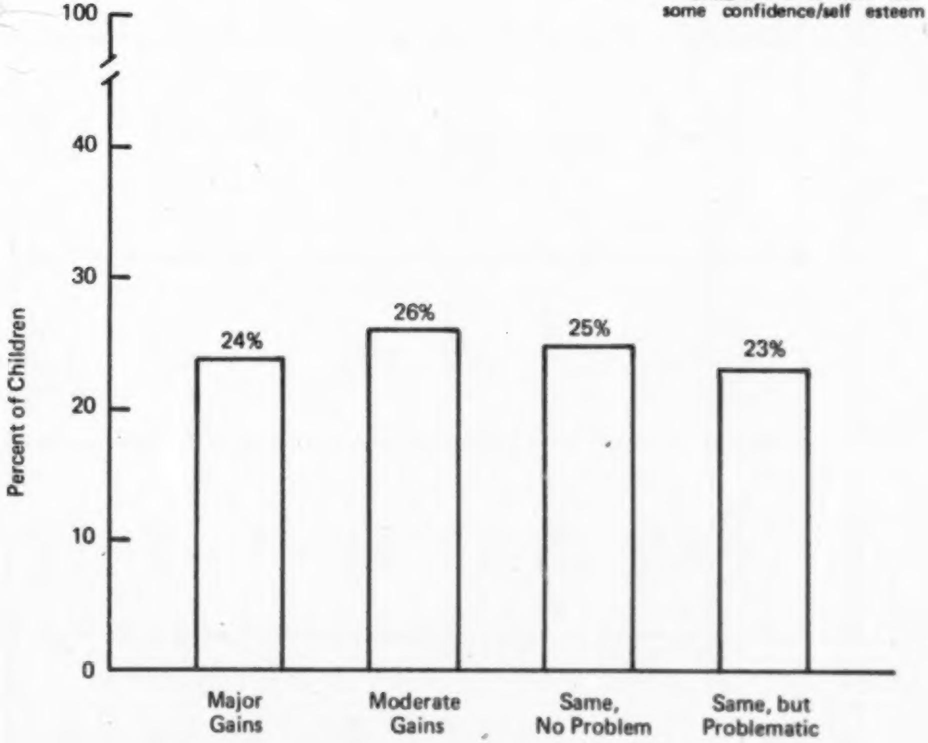


FIGURE 2.17. TEACHER ASSESSMENT OF CHANGE IN CHILDREN'S SELF-ESTEEM, ALL CITIES
(No teachers thought their pupils' self-esteem decreased. Nonresponse to question: 2%.)

TABLE 2.9

TEACHER ASSESSMENT OF CHANGE IN CHILDREN'S SELF-ESTEEM, BY CITY

Self-Esteem Changes	Denver	Oxford	St. Louis	San Francisco	Total
Major gains	19 25%	16 21%	19 27%	6 19%	60 24%
Moderate gains	21 27%	17 23%	17 25%	9 29%	64 25%
Same, not problematic	14 18%	25 34%	17 25%	17 23%	63 25%
Same, Problematic	19 25%	16 22%	14 20.3%	8 26%	57 23%
Lost some self-esteem	0 0%	0 0%	2 3%	0 0%	2 1%
No response to question	4 52%	0 0%	0 0%	1 3%	5 2%
Total	77 100%	74 100%	69 100%	31 100%	251 100%

of change in esteem correlated .386 with their assessments of change in willingness to speak out.

Table 2.10 presents assessments of change in children's willingness to express themselves orally given by the volunteers in each city. The total column shows overall improvement, apart from those children whom the volunteers felt needed no change (31% of all children reported on). Twenty-seven percent of the children were found to have made major improvement and 36% moderate improvement. Again, as in their assessment of the children's self-esteem, volunteers saw only 5% as needing improvement but not showing any as yet.

Oxford volunteers noted significantly more problems of this kind (17% of responses in the "no change needed" category, versus 43%, 32%, and 29% for Denver, St. Louis, and San Francisco, respectively). The higher "problem rate" in Oxford probably occurred because of the shyness of rural children with no school experience when tutoring began. Denver volunteers found significantly fewer children with problems of this kind. Volunteers in Oxford and San Francisco noted about 10% of the children who still had difficulty talking freely at the end of tutoring, another finding probably related to language barriers. Figure 2.18 shows barely any difference project-wide, between trained and untrained volunteers' assessments.

These data show, most importantly, that according to their volunteer tutors, roughly two-thirds of the Upswing children were hesitant to talk at the beginning of tutoring. Tutoring apparently made an important contribution to resolving this significant problem, since almost 100% of the children who were reticent or withdrawn initially were observed by their volunteer tutors to make gains.

TABLE 2.10

VOLUNTEERS' ASSESSMENT OF CHANGE IN PUPILS' WILLINGNESS TO EXPRESS THEMSELVES ORALLY, BY CITY

Assessment of Change	Denver	Oxford	St. Louis	San Francisco	Total
Major improvement	20 31%	15 25%	16 28%	10 24%	61 27%
Moderate improvement	16 25%	28 48%	20 36%	16 38%	80 36%
No change needed	28 43%	10 17%	18 32%	12 29%	68 31%
Improvement needed, none observed	1 1%	6 10%	1 2%	4 9%	12 5%
No response to question	0 0%	0 0%	1 2%	0 0%	1 1%
Total	65 100%	59 100%	56 100%	42 100%	222 100%

7. **Have you noticed any change in the child's willingness to express himself orally?** *(check one)*
   - a. Yes, there has been a major improvement . . ☐
   - b. Yes, there has been moderate improvement . ☐
   - c. No, he has expressed himself freely throughout tutoring . . . . ☐
   - d. No, I have not noticed any change, but I feel there is a need for growth in this area . . . . . ☐
   - e. Yes, the child seems to have withdrawn . . . . ☐

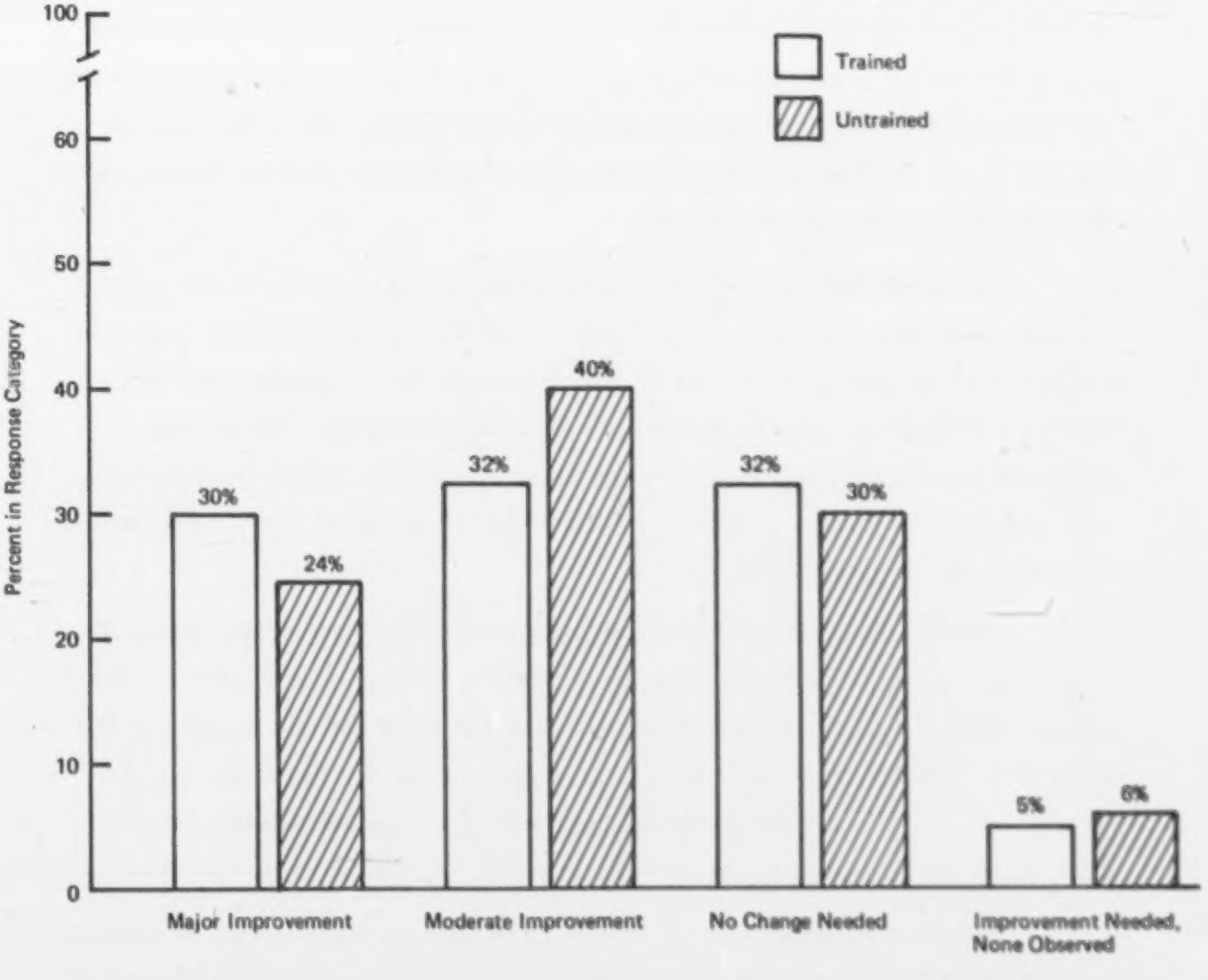


FIGURE 2.18. TRAINED AND UNTRAINED VOLUNTEERS' ASSESSMENT OF CHANGE IN PUPILS' WILLINGNESS TO EXPRESS THEMSELVES ORALLY (No volunteers thought their pupils showed signs of withdrawal. Nonresponse to question: 1% trained.)

Teachers Describe Children's Readiness to Communicate

Teachers also were asked to assess the children's willingness to express themselves orally. The teacher assessments, like the volunteers', point to a high problem rate. Table 2.11 shows that, project-wide, about 75% of the children were thought by their teachers initially to need improvement in willingness to express themselves. This compares to about two-thirds who were believed by their volunteers to need improvement. The difference is not great, but is likely another reflection of greater reticence in a group setting than in one-to-one interaction.

Although teachers noted a higher problem rate, they noted a lower improvement rate. Figure 2.19 illustrates that 27% of the children were considered already fluent, 52% showed some or major improvement, and 18% believed to have a problem in this area showed no change. Those who improved in willingness to express themselves are 72% of the children who were believed to have a problem. This compares to almost 100% improvement according to the volunteers.

As was true with self-esteem, there was no relationship between teacher and volunteer assessments of children's willingness to express themselves orally, indicating that often the two adults did not see a child in the same way. Again, it is quite likely the child did not act the same way in tutoring as in class. Nevertheless, because of the percentages of improvement, it is clear that this was an area in which important gains occurred.

Teacher assessments of change in children's willingness to express themselves orally were strongly related to teacher assessments of change in children's self-esteem (r = .511). This is an even stronger relationship than was found between the corresponding volunteer assessments. The oral expression assessment, like teacher judgment of change in esteem, showed no relationship to change in WRAT score. Both, however, showed positive relationships to the skill-area assessments given by teachers. Thus,

TABLE 2.11

TEACHER ASSESSMENT OF CHANGE IN CHILDREN'S WILLINGNESS TO EXPRESS THEMSELVES ORALLY, BY CITY

Willingness Towards Oral Expression	Denver	Oxford	St. Louis	San Francisco	Total
Yes major improvement	12 16%	12 16%	15 22%	9 29%	48 19%
Yes moderate improvement	27 35%	22 30%	25 36%	8 25%	82 33%
No change already fluent	21 27%	23 31%	15 22%	10 32%	69 27%
No change but needs improvement	13 17%	17 23%	12 17%	4 13%	46 18%
Yes withdrawn	0 0%	0 0%	2 3%	0 0%	2 1%
No response to question	4 5%	0 0%	0 0%	0 0%	4 2%
Total	77 100%	74 100%	69 100%	31 100%	251 100%

5. Have you noticed any change in the child's willingness to express himself orally since tutoring began?

a. Yes, there has been a major improvement

b. Yes, there has been a moderate improvement

c. No, he has expressed himself freely since the beginning of the school year

d. No, I have not noticed any change, but I feel there is a need for growth in this area

e. Yes, he seems to have withdrawn

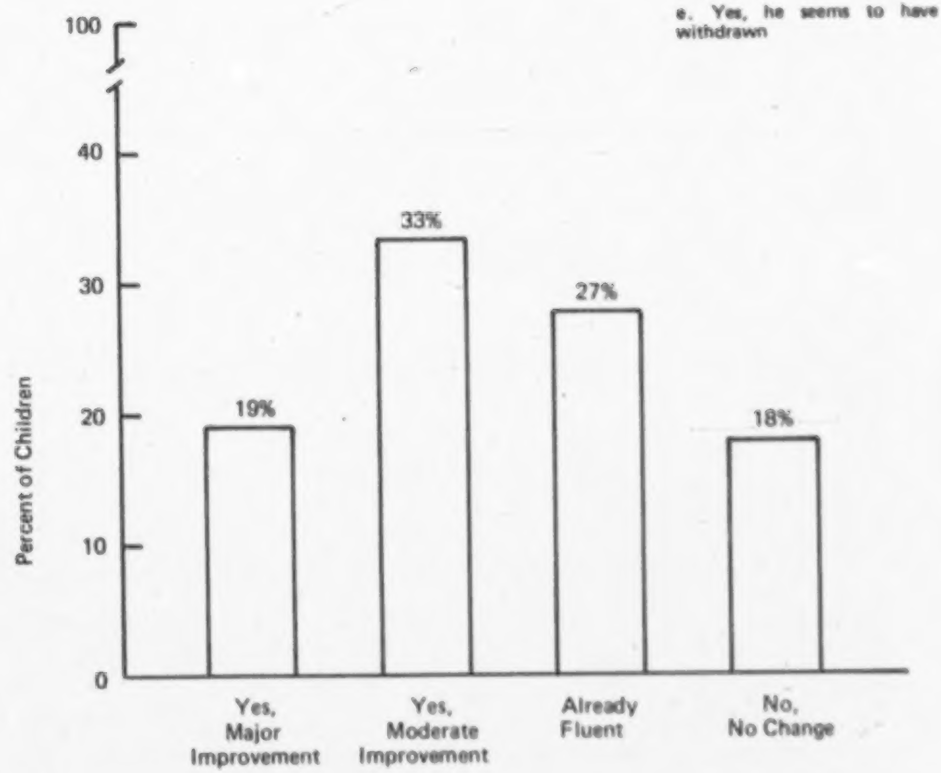


FIGURE 2.19. TEACHER ASSESSMENT OF CHANGE IN CHILDREN'S WILLINGNESS TO EXPRESS THEMSELVES ORALLY, ALL CITIES
(1% of children were categorized as withdrawn. Nonresponse to question: 2%.)

the children who were able to express themselves more freely in the classroom were those regarded by teachers as having gained confidence and having improved academically. The volunteer assessment of change in children's willingness to express themselves also did not correlate with change in WRAT, but it did correlate with the volunteer assessment of children's self-esteem, which correlated positively with change in WRAT. These outcomes indicate that improved self-esteem was involved in both greater communicativeness and better reading, although greater communicativeness apparently had no influence in the test situation.

Volunteers Describe Changes in Psychomotor Behavior

The volunteers were asked to assess their pupils on two psychomotor characteristics—hyperactivity and distractibility (defined on the questionnaire as "inability to pay attention"). These were selected because problems of either kind are readily observable, and can be singularly damaging to a child's performance in school and to his adult and peer relationships in school. These conditions commonly occur together and, when severe, usually are related to low self-esteem.

Table 2.12 indicates that volunteers found hyperactivity in close to 40% of the children (from the 62% of responses in the "no change needed" total). From the total column in the table, the hyperactive behavior of about 20% of all children reported on decreased either considerably or moderately, according to volunteers. Twenty percent of all children represents 52% of the 87 children who were believed to be hyperactive. Sixteen percent of the hyperactive children were found to have grown "considerably less hyperactive" by the end of tutoring.

The city differences pointed up in Table 2.12 are not great, except that there apparently were more hyperactive children in the Denver and San Francisco groups that received tutoring and, correspondingly, gains tended to be noted in those cities somewhat more often. Once again, training apparently

TABLE 2.12

VOLUNTEERS' ASSESSMENT OF CHANGE IN PUPILS' HYPERACTIVE BEHAVIOR, BY CITY

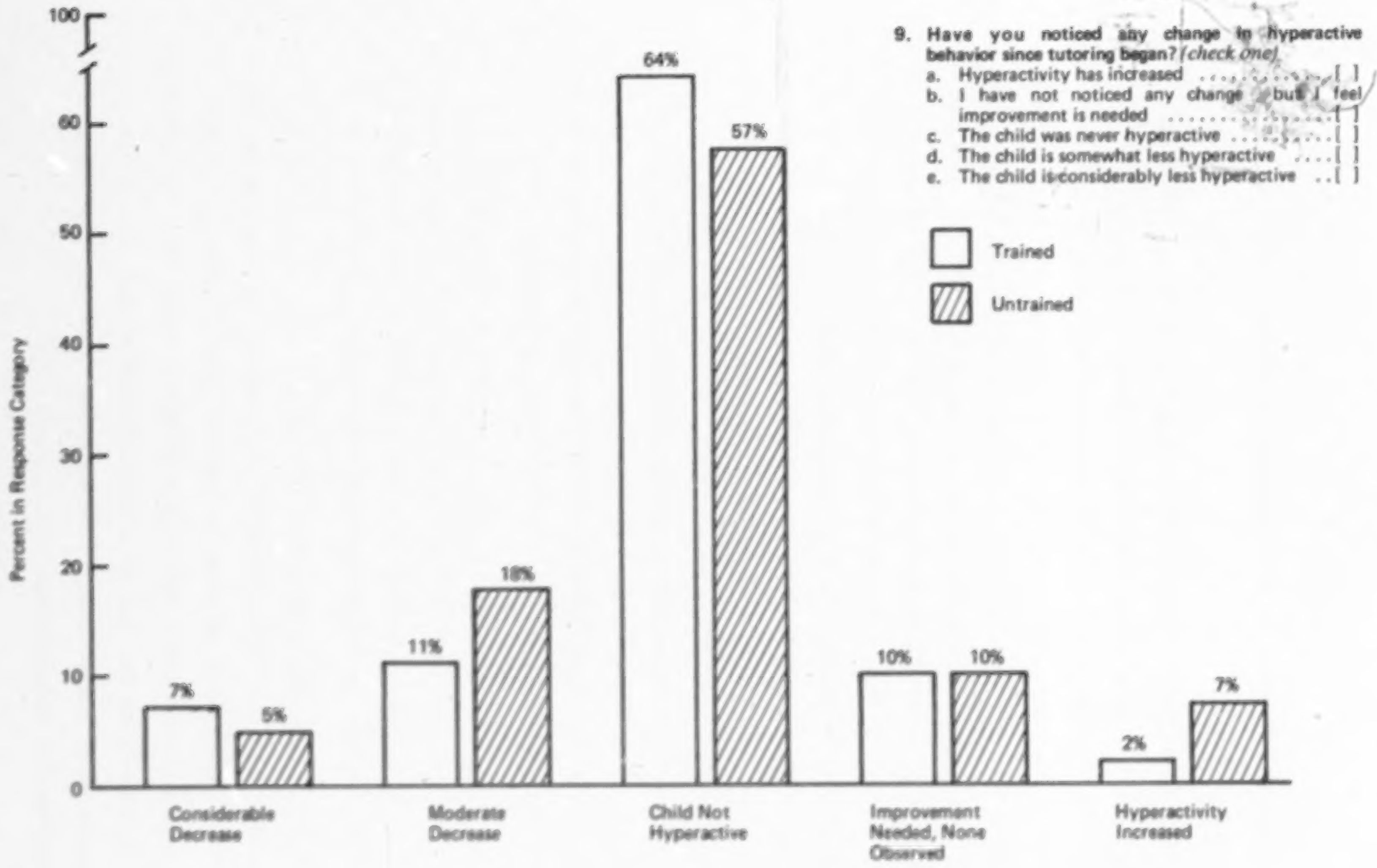
Assessment of Change	Denver	Oxford	St. Louis	San Francisco	Total
Considerable decrease	6 9%	6 10%	2 4%	0 0%	14 6%
Moderate decrease	9 14%	5 8%	4 7%	13 31%	31 14%
No change needed	38 58%	37 64%	37 66%	23 55%	135 62%
Improvement needed, none observed	9 14%	5 8%	5 9%	3 7%	22 10%
Hyperactivity increased	0 0%	4 7%	4 7%	2 5%	10 4%
No response to question	3 5%	2 3%	4 7%	1 2%	10 4%
Total	65 100%	59 100%	56 100%	42 100%	222 100%

made no important difference in child progress or volunteer assessment of progress (Figure 2.20).

Attention problems appear to have been a great deal more common than hyperactivity in the children who received Upswing tutoring. Table 2.13 (total column) shows that only 21% of the children were believed never to have had problems of this kind. Almost half of the responding volunteers felt that their students were deficient in ability to pay attention and did not improve over the tutoring period, while 11% observed a decline. Twenty-three percent of the children with problems were found to make gains. This breaks down into 3% major gains (in the table, 2% of all children reported on) and 20% moderate gains (in the table, 16% of all children). Ability to pay attention is of course a more abstract characteristic than hyperactivity and encompasses a broader range of behavior that included hyperactivity. This would account for the greater incidence of attention problems. The minimal progress noted by volunteers may have something to do with when the questionnaire was completed. Children typically become restless at the end of a school year, and the volunteers may have shared such feelings. As the novelty wears off, tutoring activities must be more and more carefully planned and paced.

Singling out the four cities, one finds few notable differences. Table 2.13 shows Oxford with the highest percentage of children with attention problems (only 12% "never a problem" versus 25%-30% in that category in the other cities) as well as the highest percentage of gains.

Figure 2.21 shows essential similarity in trained and untrained volunteers' assessments. The percentage of modest gains noted by untrained volunteers is close to twice as great as that for trained, although the percentage of problematic children noted by trained volunteers was very slightly higher. It is interesting that similar proportions are evident in the hyperactivity assessments (Figure 2.20). ORI believes, however, that these minor differences are insignificant.



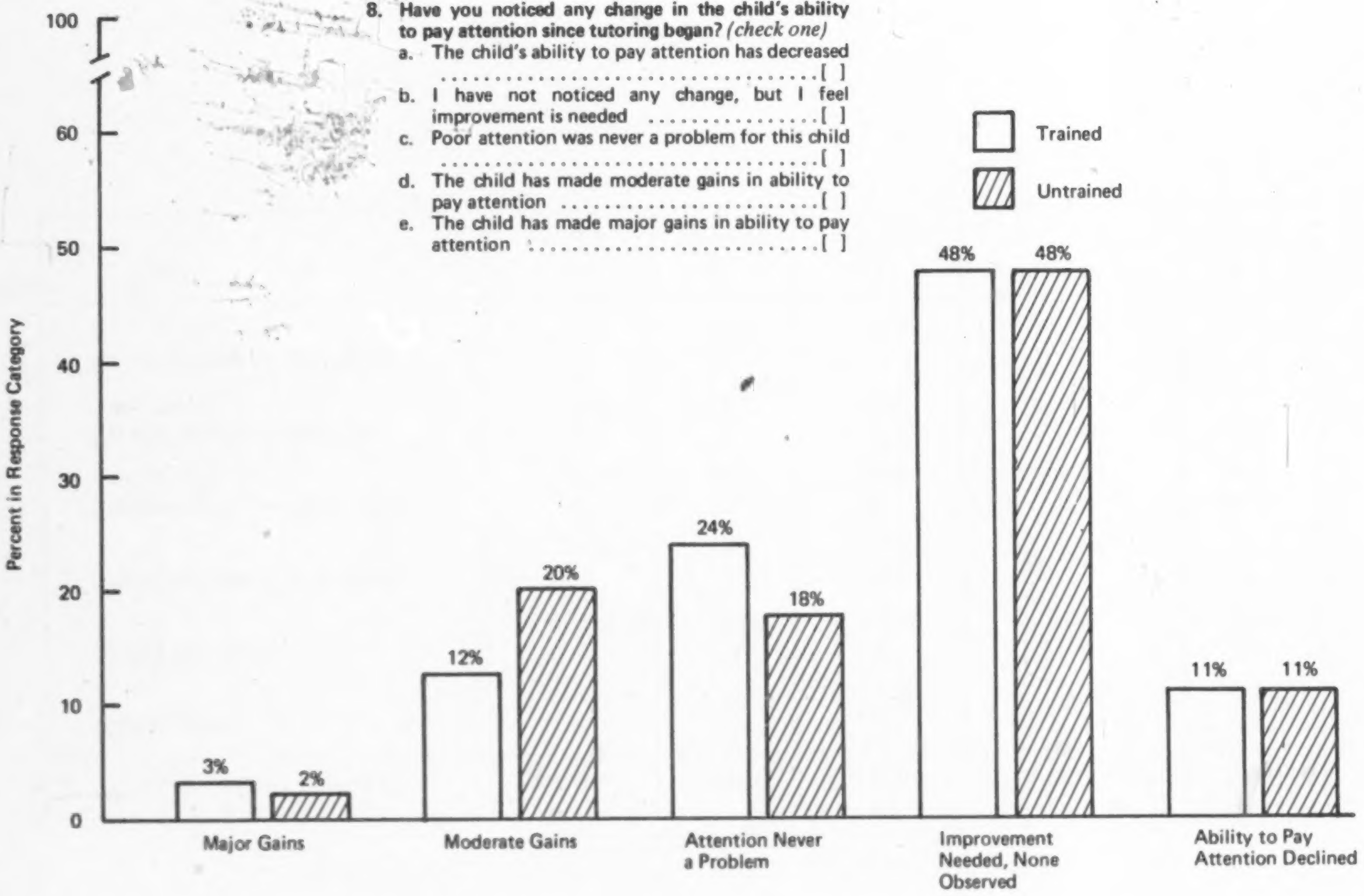
9. **Have you noticed any change in hyperactive behavior since tutoring began?** *(check one)*
   a. Hyperactivity has increased . . . . [ ]
   b. I have not noticed any change, but I feel improvement is needed . . . . [ ]
   c. The child was never hyperactive . . . . [ ]
   d. The child is somewhat less hyperactive . . . . [ ]
   e. The child is considerably less hyperactive . . [ ]

FIGURE 2.20. TRAINED AND UNTRAINED VOLUNTEERS' ASSESSMENT OF CHANGE IN PUPILS' HYPERACTIVE BEHAVIOR, IF ANY
(Nonresponse to question: 6% trained, 3% untrained.)

TABLE 2.13

VOLUNTEERS' ASSESSMENT OF CHANGE IN PUPILS' ABILITY TO PAY ATTENTION, BY CITY

Assessment of Change	Denver	Oxford	St. Louis	San Francisco	Total
Major gains	1 1%	2 3%	1 2%	1 2%	5 2%
Moderate gains	5 8%	17 29%	7 13%	6 14%	35 16%
Attention never a problem	16 25%	7 12%	16 28%	8 19%	47 21%
Improvement needed, none observed	37 57%	25 42%	23 41%	21 50%	106 48%
Ability to pay attention declined	5 8%	8 14%	7 13%	5 11%	25 11%
No response to question	1 1%	0 0%	2 3%	1 2%	4 2%
Total	65 100%	59 100%	56 100%	42 100%	222 100%



8. **Have you noticed any change in the child's ability to pay attention since tutoring began?** *(check one)*

a. The child's ability to pay attention has decreased ....[ ]

b. I have not noticed any change, but I feel improvement is needed ....[ ]

c. Poor attention was never a problem for this child ....[ ]

d. The child has made moderate gains in ability to pay attention ....[ ]

e. The child has made major gains in ability to pay attention ....[ ]

Percent in Response Category
100
60
50
40
30
20
10
0
Trained
Untrained
3%
2%
12%
20%
24%
18%
48%
48%
11%
11%
Major Gains
Moderate Gains
Attention Never a Problem
Improvement Needed, None Observed
Ability to Pay Attention Declined

FIGURE 2.21. TRAINED AND UNTRAINED VOLUNTEERS' ASSESSMENT OF CHANGE IN PUPILS' ABILITY TO PAY ATTENTION
(Nonresponse to question: 2% trained, 1% untrained.)

Volunteer assessments of change in ability to pay attention showed a negative correlation with change in WRAT score, i.e., more distractible children tended to do somewhat better on the reading achievement test. This finding suggests that boredom was involved in inability to pay attention during tutoring. Change in hyperactive behavior as assessed by volunteers showed no correlation with change in WRAT score.

Changes in these psychomotor characteristics as demonstrated during tutoring apparently were related to each other. The two volunteer assessments yielded a correlation coefficient of .311.

As for the hypothesized relationships between attention, hyperactivity and self-esteem, only one was supported by the volunteer data. Change in ability to pay attention as assessed by volunteer correlated .220 with change in esteem as assessed by the volunteer.

Teachers Describe Changes in Psychomotor Behavior

The teachers also were asked to assess the tutored children on hyperactivity and inability to pay attention, and they too noted hyperactivity in about 40% of the children on whom they reported (Figure 2.22). Fifteen percent of the total number of children reported on were found to make some improvement and 4% to make major improvement in controlling hyperactivity over the tutoring period. That is, about half of the children believed to have this kind of problem made steps to overcome it, according to their teachers. The other half showed no improvement in their teachers' view. About 6% of the total child population under consideration were said to grow more hyperactive over the tutoring period and 12% to make no change. It should be noted that at least some improvement, due to maturation, could be expected. As discussed in relation to Table 2.12, the volunteers gave a very similar picture of rate of improvement.

Table 2.14 shows that about half of the Denver children and about 60% of those in San Francisco were considered hyperactive by their teachers.

8. Has the child shown any changes in amount of hyperactive behavior since tutoring began?

a. Hyperactivity has increased

b. Improvement is needed but none has been made yet

c. The child was never hyperactive

d. The child is somewhat less hyperactive

e. The child is considerably less hyperactive

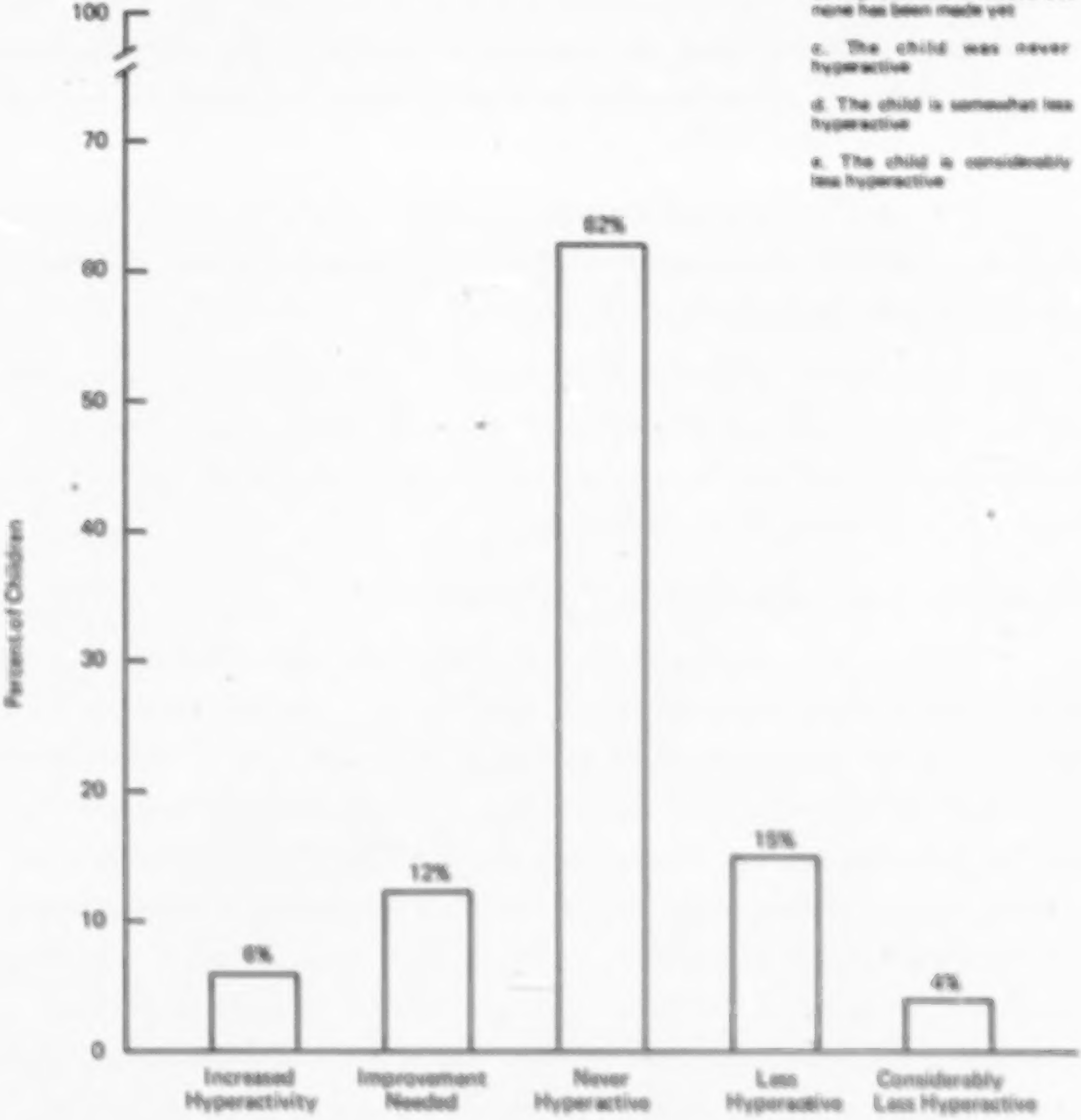


FIGURE 2.22. TEACHER ASSESSMENT OF CHANGE IN CHILDREN'S HYPERACTIVE BEHAVIOR SINCE TUTORING BEGAN, ALL CITIES (Nonresponse to question: 4%.)

TABLE 2.14

TEACHER ASSESSMENT OF CHANGE IN HYPERACTIVITY AMONG ENROLLEES SINCE TUTORING PROGRAM BEGAN, BY CITY

Changes in Hyperactive Behavior	Denver	Oxford	St. Louis	San Francisco	Total
Increased	5 6%	4 5%	5 7%	2 7%	16 6%
No change, improvement needed	12 16%	6 8%	6 9%	5 16%	29 12%
Never hyperactive	38 49%	53 72%	51 71%	13 42%	155 62%
Less hyperactive	12 16%	10 14%	6 9%	10 32%	38 15%
Considerably less hyperactive	6 8%	1 1%	1 1%	1 3%	9 4%
No response to question	4 5%	0 0%	0 0%	0 0%	4 1%
Total	77 100%	74 100%	69 100%	31 100%	251 100%

at least at the start of the tutoring program. San Francisco teachers noted improvement by the end of the year in a slightly higher percentage of children considered to have this kind of problem, describing 55% of those considered hyperactive as less so and 5% (one child) as "considerably less so" (32% and 3%, respectively, of all children on whom they reported). Denver teachers described 31% of the hyperactive children (16% of the total Denver group) as less hyperactive at the end of the year and 15% (8% of the total) as considerably less so. Denver volunteers noted improvement considerably more often (Table 2.12).

Oxford and St. Louis teachers, like the volunteers in those cities, did not find hyperactivity as prevalent as did their counterparts in the other two cities. Both the Oxford and St. Louis respondents indicated that about three-quarters of their pupils were "never hyperactive." The Oxford teachers noted improvement in a greater percentage of children who were considered to have this problem than did St. Louis or Denver teachers.

ORI knows of no data on the incidence of hyperactivity in a "normal" population of Upswing-age children. The roughly one-third incidence reflected in both teacher and volunteers assessments seems high for a random sample but reasonable for a group selected on the basis of learning difficulties. Since hyperactivity is commonly a physiochemical problem, the improvement noted in the Upswing children is somewhat remarkable and not necessarily attributable, even in part, to the tutoring. For the same reason, the increased hyperactivity noted in about 5% of the children should not necessarily be considered an effect of tutoring.

The teacher assessment of change in amount of hyperactive behavior, like the volunteer assessment, was not correlated with change in WRAT score (-.065). The other hypothesis, that in a school setting hyperactivity and self-esteem tend to vary together, is supported by the teacher data. The correlation coefficient between the two teacher assessments was a relatively high .281. The two corresponding volunteer assessments yielded no meaningful correlation. The volunteer's opinion of a child's level of self-esteem had nothing to do with the volunteer's opinion of the child's level of hyperactivity. It also may be that in the tutoring situation hyperactivity was not detrimental to self-esteem, while in the classroom it was.

ORI also compiled data on teacher-measured changes over the tutoring period in the childrens' ability to pay attention. Figure 2.23 describes only 16% of the children from all the cities as never having had problems in this area. Thus the teacher data, like that from the volunteers, suggests that distractibility was a major difficulty of Upswing children.

Of the 85% of problematic children, teachers saw improvement over the tutoring period in two-thirds (while the volunteers saw improvement in only about a quarter of the children whom they felt had difficulty paying attention). Figure 2.23 shows 43% of the total population in the "moderate gains" category and 13% in the major gains category. These figures respectively represent 50% and 16% of the children who were considered to have attention problems, for a substantial improvement total of 66%. Volunteers did not see this kind or progress, as discussed previously. Thus, the teacher and volunteer assessments of change in ability to pay attention did not correlate. About a quarter of the children had difficulty "paying attention" but did not improve according to their teachers. About 2% were found to be more distractible after tutoring.

Table 2.15 shows two interesting contrasts among the cities. Denver teachers apparently felt a significantly larger percentage of their pupils had problems in this area than did teachers in the other cities. San Francisco shows a significantly smaller percentage of children making major gains in overcoming poor attention. However, the same cautions apply in interpreting

9. Has there been any change in the child's ability to pay attention since tutoring began?

a. The child has made major gains in ability to pay attention

b. The child has made moderate gains in ability to pay attention

c. Poor attention was never a problem for this child

d. There is need for improvement but none has been made yet

e. The child's ability to pay attention has decreased

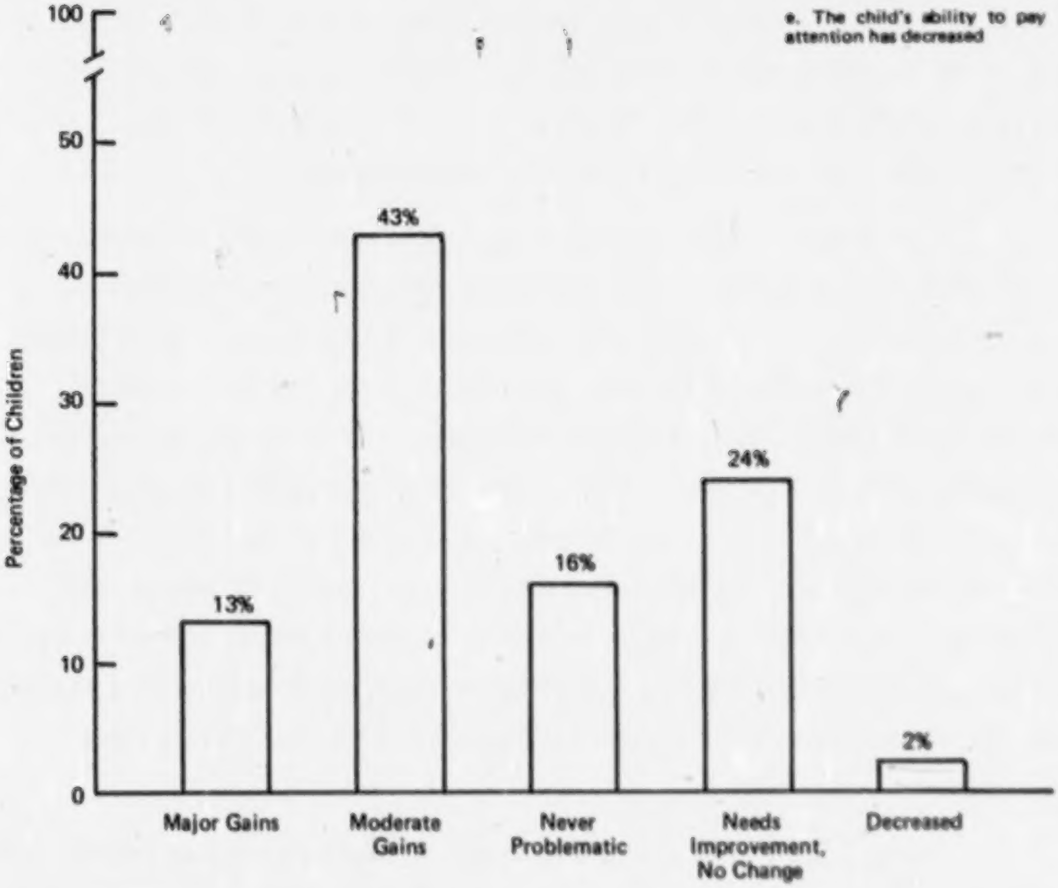


FIGURE 2.23. TEACHER ASSESSMENT OF CHANGE IN CHILDREN'S ABILITY TO PAY ATTENTION SINCE TUTORING BEGAN, ALL CITIES
(Nonresponse to question: 2%.)

TABLE 2.15

TEACHER ASSESSMENT OF CHANGE IN CHILDREN'S ABILITY TO PAY ATTENTION SINCE TUTORING BEGAN, BY CITY

Child's Ability to Pay Attention	Denver	Oxford	St. Louis	San Francisco	Total
Major gains	12 16%	11 15%	9 13%	1 3%	33 13%
Moderate gains	37 48%	33 45%	22 32%	14 45%	106 43%
Never problematic	6 8%	12 16%	16 23%	7 23%	41 16%
No change, needs improvement	15 19%	18 24%	18 26%	8 26%	59 24%
Decreased	2 3%	0 0%	4 6%	0 0%	6 2%
No response to question	5 6%	0 0%	0 0%	1 3%	6 2%
Total	77 100%	74 100%	69 100%	31 100%	251 100%

these data as in interpreting the data on hyperactivity. Comparing Table 2.15 with the breakdown of volunteer opinion in Table 2.11, differences of opinion between volunteers and teachers within cities are evident, as indicated by the correlation coefficient.

Teacher assessments of change in ability to pay attention also did not correlate with change in WRAT score but did correlate highly with teacher assessments of change in children's self-esteem, their willingness to express themselves orally, their reading and other language skills, and their overall progress toward grade-level achievement. The teacher views of hyperactivity and ability to pay attention also correlated, although the coefficient was comparatively low (r = .186).

To summarize, hyperactivity and, particularly, inability to pay attention were common characteristics of the Upswing children. The two often occurred together and it appears that they often were alleviated together. Inability to pay attention was the more stubborn as well as the more common problem, in the volunteers' view, while it was more often resolved than hyperactivity according to the teachers. These psychomotor characteristics did not show the expected relationship to change in reading skills as measured by the WRAT, but they were strongly related to change in reading and other skills as judged by teachers.

ANALYSIS OF INFLUENCES ON CHANGE IN CHILDREN'S SCHOOL PERFORMANCE

One of the evaluation objectives was to determine which, if any, conditions in the tutoring situation appeared to be related to the impact of tutoring on the children's reading performance. Another objective was to examine relationships between selected family characteristics (income, number of children in the home, parents' level of education, etc.) and changes in the school performance of the tutored children.

Questionnaires for volunteers, teachers, and parents were used to collect data for these two parts of the evaluation. The latter effort had to be abandoned because parents, the source of family background data, generally did not return their questionnaires despite follow-up attempts. (See Volume I, pages 2-2 and 2-40). The analysis of the impact of conditions of tutoring is described here.

Methodology

ORI identified 25 psychosocial variables associated with Upswing tutoring that potentially might influence its results. These were such things as volunteer's level of education, previous relevant experience, and previous training in child development; teacher's years of experience teaching first-grade children and previous experience working with a volunteer or teacher aide; regularity of volunteer's attendance at tutoring sessions; cooperativeness with teacher demonstrated by volunteer (teacher's assessment); volunteer's perception of teacher attitude toward him/her; etc.

The psychosocial variables were operationally defined as items on volunteer and teacher questionnaires. Response choices were assigned numerical values so that each variable could be considered as a quantity in each child's Upswing experience. These data were stored in a computer file of information for each child. All first and final test scores (including IQ) and the volunteer and teacher assessments of changes in the children's self-esteem, communicativeness, and psychomotor behavior also were included. The file contained data on a total of 46 variables.

We then used the technique of stepwise multiple linear regression to assess the degree to which the 46 variables appeared to be associated with the study's major criterion variable: change in reading achievement, as measured by the WRAT. The computer program also yields a matrix of correlation coefficients that express the amount of associated variation between all possible pairs of variables involved.

The study's criterion variables included change in children's reading achievement, self-esteem, and psychomotor control. However, as noted earlier, only one of these—change in reading achievement—was entered into the regression as a dependent variable. The measure of change in reading achievement used for this purpose was the difference between initial and final WRAT score because the data from the Metropolitan Achievement Test were not usable for all cities and appeared to be unreliable. There was no change in psychomotor behavior as measured by the VMI test. Volunteer and teacher assessments of criterion-area changes in the children were included in the regression as independent variables. Since they are subjective measures, it was felt that the separate regression runs necessary to treat them as dependent variables were not warranted. However, we did want to explore their relationships to change in reading achievement as measured by the WRAT and to each other.

Parameters of the Population

In selecting the children who would be considered in this part of the evaluation, the first criterion applied was whether both pre- and post-tutoring WRAT scores were available for a child. The second criterion was completeness of questionnaire data. Only those children whose volunteers and teachers returned their registration forms and their first and final questionnaires could be included. The population dealt with here is therefore much smaller than the population of all children who were tutored through March 1972 and who took both the pre- and post-tutoring WRAT (the population for the presentation of test results). It is also smaller than the populations covered in the teacher and volunteer questionnaires. The regression considered data on 131 children.

General Findings

The regression showed that 35 of the variables considered explained about 35% of the change in WRAT reading score. Adding variables beyond these 35 did not increase proportion of variance explained by the regression. The correlation between any one variable and change in WRAT score was low. Table 2.16 lists the 35 variables brought into the regression. The multiple r^2 values indicate the cumulative percentage of variance in WRAT score that was accounted for as each variable was added. Note that after the eleventh variable, the increase in r^2 becomes minute. The subsequent variables had negligible explanatory power.

The observations that went into the regression can be categorized in two ways: as characteristics of the child (internal) or as conditions of the tutoring situation (external). The first category includes IQ; starting level of visual-motor integration and reading performance; and change in level of self-esteem, hyperactivity, distractibility, oral language skills, and overall academic performance. The second category includes such things as child's response to tutor, teacher's understanding of her part in the project, volunteer assessment of training received, etc.

Table 2.16 shows that, according to the regression, things internal to the child were most related to change in WRAT score. There was, however, a cluster of external conditions that showed relationship to change in WRAT and to various "internal" changes in the children as assessed by teachers and volunteers. The most important of these external conditions was whether the volunteer felt adequately prepared to use the methods and materials of tutoring.

The fact that child characteristics contributed more to change in WRAT than did conditions of tutoring tends to strengthen the conclusion that very little about the tutoring situation mattered except that the child had a tutor. However, the circular nature of the relationships suggested by the

TABLE 2.16

VARIABLES RELATED TO CHANGE IN WRAT READING TEST SCORE

Variable	Multiple r^2*
Volunteer feeling about whether he/she was adequately prepared to use methods and materials in tutoring	.116
Volunteer assessment of change in child's self-esteem	.149
Volunteer assessment of change in child's ability to pay attention	.172
Volunteer assessment of child's response to tutoring activities	.199
Volunteer assessment of tutoring's effect on child's overall progress in school	.221
Teacher assessment of child's progress toward grade-level achievement	.233
Teacher assessment of change in child's reading skills	.247
Teacher assessment of change in child's ability to pay attention	.259
Teacher assessment of change in child's language skills other than reading	.272
Initial VMI score	.283

* r^2 value x 100 = cumulative percentage of variation explained.

TABLE 2.16 (Cont)

Variable	Multiple r^2
Teacher understanding of higher role in the project*	.292
Volunteer assessment of the child's feelings about leaving class for tutoring	.300
Teachers willingness to work with Upswing volunteers again	.306
Teacher assessment of child's willingness to express self orally	.311
Volunteer's previous training in child development	.315
Volunteer's level of education	.323
Volunteer assessment of teacher attitude toward volunteer's help	.328
Teacher's previous experience working with volunteer or other classroom aide	.331
Volunteer role satisfaction	.334
Volunteer assessment of the preparation for tutoring given by Project Upswing	.338

* Beyond this point the variables were found to be of neglible value in explaining change in reading skill as measured by the WRAT.

TABLE 2.16 (Cont)

Variable	Multiple r^2
Volunteer opinion about adequacy of guidance given by teacher	.339
Teacher assessment of change in child's self-esteem	.341
Volunteer willingness to be in Upswing again	.342
Volunteer attendance at tutoring	.343
Teacher feelings about amount of time Upswing required	.344
Volunteer assessment of child's response to him/her	.344
Teacher assessment of change in child's hyperactive behavior	.345
Volunteer assessment of change in child's hyperactive behavior	.345
Volunteer opinion about adequacy of Upswing training	.345
Teacher assessment of volunteer cooperativeness	.346
Volunteer assessment of change in child's willingness to express himself orally	.346
Volunteer's previous relevant experience	.346

TABLE 2.16 (Cont)

Variable	Multiple r^2
Volunteer opinion about adequacy of tutoring environment	.347
Teacher's experience teaching first grade	.347
Child's IQ	.347

analysis indicates that the conditions of tutoring are of some importance (conditions relate to changes in the child other than reading proficiency, which in turn relate to changes in reading, which in turn foster move favorable conditions, i.e., attitudes).

The regression stopped with 65% variation not accounted for by the variables measured. It is likely that many other variables would have to be brought in to account for all the variation in achievement scores. All cannot be explored by any known research technique, but based on this year's findings, ORI is particularly interested in getting a better measure of level of self-esteem during the second year of the project. Also, of course, data are needed on home environment to see how it enters into the configuration of influences on tutoring results. Since our efforts to get this kind of information from parents was unseccessful, a test that reflects home environment is being used in the second year of Upswing.

Analysis of Specific Variables Related to Change in Children's Tested Reading Achievement Level

In the following explanation we are not considering multiple correlations, but rather the simple correlations between single independent variables and change in WRAT score. Analysis of the matrix of simple correlation coefficients produced by the regression program pointed up a few relatively important variables that were not brought into the regression or that appeared from the regression to have virtually no explanatory power. This kind of result occurs when one variable, independently related to the criterion variable (here, the WRAT), measures something also measured by a third variable that has an even stronger relationship to the criterion.

The variables found to be most related to change in WRAT from analysis of both the regression results and the correlation matrix are given in Table 2.17. The table shows the correlation coefficients for all pairs of variables.

TABLE 2.17

CORRELATIONS BETWEEN MAJOR INDEPENDENT VARIABLES AND CHANGE IN WRAT SCORE

Variable Descriptor	1	2.	3	4	5	6	7	8	9	10	11	12
1. Child's overall progress – Vol.	1.000											
2. Change in child's self-esteem – Teacher	.214	1.000										
3. Change in child's ability to pay attention – Vol.	.198	.220	1.000									
4. Change in child's reading skills – Teacher	.307	.040	–.070	1.000								
5. Change in child's language skills – Teacher	.222	.048	.043	.573	1.000							
6. Whether felt prepared to use methods and materials of tutoring	.196	.081	.137	.018	.051	1.000						
7. Child's response to tutoring activities	.112	.202	.277	.162	.081	.121	1.000					
8. Whether vol. expectations were fulfilled	.157	.078	–.009	.040	.152	.119	.072	1.000				
9. Whether vol. would be in Upswing again	.186	.059	.050	.151	.234	.163	–.038	.146	1.000			
10. Vol. assessment of adequacy of preparation for tutoring given by project	.318	–.012	–.085	.102	–.025	.179	.072	.297	.109	1.000		
11. Whether teacher understood role	.066	.014	–.082	.096	.223	.013	–.071	.198	.079	.093	1.000	
12. Change in WRAT score	.210	.182	–.132	.164	.138	.226	.101	.127	.124	.119	.101	1.000

Again in Table 2.17, we see that the strongest individual predictor of change in a child's WRAT score was how adequately prepared the volunteer felt to use methods and materials for tutoring. The correlation coefficient, .226, indicates that this variable, by itself, explains about 5% of the variance of change in WRAT score. This variable also is related to the volunteer's perceptions of the child's overall progress, his ability to pay attention, and his response to tutoring activities. The methods and materials variable is, further, one of a cluster of volunteer satisfaction variables (variables 8 through 10 in Table 2.17) that are all related to each other, to the volunteer's assessment of child's overall progress, and to change in the child's WRAT score. Although the individual correlation coefficients are low, the analysis suggests that these variables do influence change in reading achievement. It would be worthwhile to monitor these aspects of volunteer satisfaction as part of the process of managing a project like Upswing.

Another condition of the tutoring situation that showed some relationship to the criterion variable was whether the teacher understood her/his role in the project (variable 11 in the table; r = .101). Like the others this variable becomes more important by its association with other independent variables involved in the regression. It correlated positively with fulfillment of volunteer expectations about the project (variable 8 in Table 2.17), teacher perception of favorable responses by children to their tutors, and volunteer opinion about the adequacy of teacher guidance (which do not appear in the table because they did not correlate with change in WRAT score). The correlation between teacher role understanding and perception of language skill improvement by the child (variable 5 in the table) may be spurious.

The other variables that seem to be related to change in WRAT performance were all characteristics of the children themselves. All measures of these variables were subjective—volunteer and teacher assessments—and in considering them, it should be kept in mind that the truth of the relationships depends on the accuracy of volunteers' and teachers' perceptions of changes in the child.

As previously stated in the detailed analysis of volunteer and teacher assessments, it was hypothesized that increases in reading achievement would be associated with increase in self-esteem. The regression showed that this was true when the measure of change in self-esteem was volunteer assessment. In fact, volunteer assessment of change in children's self-esteem was the second best predictor of change in WRAT score according to the regression analysis (Table 2.16).

It is interesting that there was no relationship between volunteer and teacher assessments of change in children's self-esteem, and the teacher assessment of change in esteem did not correlate with change in WRAT score. Change in the children's skills as assessed by teachers did correlate with change in WRAT scores (variable 4 in Table 2.17, r = .164; and variable 5, r = .138). However, the volunteer's general assessment of how tutoring affected their pupils (variable 1 in Table 2.17) showed a stronger correlation with change in WRAT score (r = .210). What these findings suggest is that volunteers may have assessed the children more in the way of the test than did teachers. ORI believes that this probably was the case, since the volunteers worked with the children one-to-one and the WRAT is an individually-administered test. The data also suggest that teacher assessments may not necessarily give a true indication of a child's performance or performance capabilities.

Changes in children's "ability to pay attention" as assessed by volunteers, was found by the regression to be the third best predictor of change in WRAT score. The correlation between the two was -.132 (Table 2.17, variable 3). The fascinating thing about this relationship is that it is negative. There was a tendency for children who were considered more distractible by their volunteers to make greater gains in WRAT score.

Twenty-three children were observed by their volunteers to become more distractible over the tutoring period. Eighteen of these children improved their WRAT standard scores on the final test from 2 to 21 points. The four children found to be the most distractible and having the greatest problems giving attention made major gains in standard score (10, 17, 17 and 18 points). The five children whose WRAT scores as well as ability to pay attention declined did not lose as many points as the increasingly distractible children gained. Their losses were 2, 2, 3, 4, and 7 standard score points. Thus the negative correlation does not appear to be a fluke.

III. PARTICIPANTS' RETROSPECTIVE VIEWS OF PROJECT UPSWING

PURPOSE

This section is to give understanding of what Project Upswing was like in its first year. It provides better perspective for judging project effectiveness and strengthens the basis for recommending changes for Upswing in the second year of the project.[1] The topics covered include:

- Project organization and operations
- Volunteer training
- Relationships among the various groups involved
- Satisfaction of volunteers and teachers with the experience.

---

[1] Many changes have already been made based on the information presented here. ORI informally reported most of these findings to the directors, since Phase II had to get under way before this report could be issued.

Volunteer and teacher assessments of changes in the children were presented in the Section II analysis of tutoring results.

DATA SOURCES AND COLLECTION PROCESS

The data presented in this section were taken from questionnaires filled out by Upswing volunteers and teachers at the end of the school year. (See Appendix for copies of these forms.) The questionnaires were mailed by ORI directly to Oxford and St. Louis volunteers and teachers in May 1972. At the request of the university project directors in Denver and San Francisco, sets of the forms were provided to them for distribution by their staffs. A mail follow-up on nonrespondents in all cities was conducted by ORI (forms sent out June 9, 1972). A telephone follow-up was conducted by the university project staffs approximately two weeks later. An attempt was made to contact all nonrespondents.

FORMAT

Volunteers' and teachers' responses to questionnaire items are presented separately. The data from volunteers are analyzed in two ways: by training status, and by city, generally without regard for training status, as appropriate. The data from teachers are analyzed for the project as a whole and by city. Comparisons are made between volunteer and teacher observations as appropriate. A summary of the important findings precedes the detailed questionnaire analysis in both cases.

VOLUNTEERS' FINAL IMPRESSIONS OF PROJECT UPSWING

Parameters of the Population

A total of 407 volunteers registered to be Project Upswing tutors; 223 were assigned to the trained group and 184 to the untrained group. Attrition made deep cuts in these numbers, reducing the training group 33% to 149 volunteers and the untrained 55% to 83 volunteers. A number of volunteers who attrited returned final questionnaires, however, and they were included in this part of the analysis. (Those known to have attrited before March 31, 1972 were not sent forms, but ORI and the university project staffs did not know of all attritees, as explained in Section VI of this volume.) Others, some of whom stayed with the project to the end, did not return final questionnaires. Thus the number of questionnaire respondents does not exactly correspond to the number of volunteers who tutored the full time.

The questionnaire response rates were computed on the number of volunteers in each city and status group who were known to have received a questionnaire. The rates are given in Table 3.1. They are outstanding except for Oxford's untrained volunteers,[2/] although two follow-up waves were necessary to get them. Based on the number of volunteers left in the population after attrition, the respondents to the final questionnaire can be considered fully representative of the volunteers who completed tutoring (except, perhaps, in Oxford).

[2/] There was a special problem in Oxford because of heavy student attrition and replacement of untrained attritees. Many of the students who tutored first semester were not sent forms since they were known to have attrited before March 31, 1972. Replacement volunteers were sent forms when their addresses were known, but often did not respond, possibly because they felt unable to answer many of the questions, which were designed for respondents who has been involved from the beginning.

TABLE 3.1

RATES OF RESPONSE TO FINAL QUESTIONNAIRE FOR VOLUNTEERS IN EACH CITY AND PROJECT-WIDE, BY STATUS GROUP

City	Trained		Untrained		Total	
	Received Form	Returned Form*	Received Form	Returned Form*	Received Form	Returned Form*
Denver	40	40 100%	25	25 100%	65	65 100%
Oxford	30	25 83%	50	34 68%	80	59 74%
St. Louis	37	30 81%	27	26 96%	64	56 87%
San Francisco	28	28 100%	14	14 100%	42	42 100%
Total	135	123 92%	116	99 91%	251	222 88%

* Percentage given is percentage of those who received forms.

Summary of Volunteers' Final Impressions

- Volunteers generally felt that 2-3 hours per week is the appropriate amount of tutoring time.

- Eighty-five percent of the volunteers prepared for tutoring sessions beforehand. Most required only 15 minutes to a half hour preparation time per session, indicating the task was not onerous.

- The tutoring environment was unsatisfactory to many volunteers (close to half), although most worked alone with the children in unused rooms. Problems noted included such things as inadequate lighting and equipment.

- About 75% of all volunteers had no or few difficulties in getting materials needed for tutoring. The untrained group encountered more problems in this area than the trained, since the project provided no or few materials for the former.

- All volunteers evidently used a variety of materials and techniques in tutoring. The DISTAR and Peabody kits were not utilized to any great extent.

- Nearly all volunteers considered their tutoring methods and materials effective. The trained group tended to show somewhat greater confidence than the untrained.

- Teachers were a significant source of guidance and assistance for both trained and untrained volunteers, although, as expected, the untrained more often considered teachers their primary source of aid.

- About 40% of the trained and over half of the untrained volunteers felt they needed more guidance and assistance than they received during the year.
- Volunteers indicated they wanted to work with teachers but did not favor highly directive teacher assistance.
- Both trained and untrained volunteers considered day-to-day experience with the child as the most important contributor to effective tutoring. However only about 5% of both groups considered training unnecessary.
- Trained volunteers were not fully satisfied with the training they received. Generally they wanted to learn how to use a greater variety of instructional techniques, to know more about diagnosis of individual needs, and to know more about what is done in the classroom.
- It appears that relationships between volunteers and their pupils were almost always happy by the end of the tutoring period and that there were few major problems even at the beginning.
- There was a sizable number of instances of language barriers between volunteers and

children, but such difficulties apparently did not interfere with rapport.

- Teachers communicated positive feelings to the volunteers. Most volunteers felt teachers welcomed the Upswing assistance.
- Volunteers generally either were satisfied with the amount of support they received from teachers or wanted more. Almost none found teacher assistance overbearing — another indication of good relationships.
- The majority of volunteers were, on the whole, satisfied with their experience in Project Upswing. There were areas of dissatisfaction, however. These included: preparation for tutoring given by Upswing (most notably, untrained volunteers wanted training), communications, and assistance received over the year. Trained volunteers said they would be willing to tutor again slightly more frequently than untrained.
- The comments from the volunteers' final impressions questionnaires indicated over all satisfaction with Project Upswing as a tutoring program. Many hoped that it would continue as part of a tutorial program in their cities and spread into a nationwide project.

Project Organization and Operations

Tutoring Time. The volunteers generally believed that 2 to 3 hours per week were enough time to spend tutoring the children (actual time in contact with child excluding preparation time). Looking at the total column in Table 3.2, 47% thought the 2 hours given in the first year adequate, while 33% said 3 hours per week would be better. Only 4% thought 1 hour's tutoring would suffice, while 11% felt 4 hours or more are needed.

Studying the opinions from each city, Denver volunteers stand out in preferring more tutoring time. Almost half stated that 3 hours per week should be spent in tutoring, and about 20% said even more time is needed.

The opinions of trained and untrained volunteers are presented for comparison in Figure 3.1. There was virtually no difference.

Balancing the amount of time volunteers can give, transportation problems, other school experiences needed by the children, etc., it appears that 2 to 3 hours weekly is the appropriate amount of time for in-school tutoring. Other data indicate general agreement that a single session with Upswing-age children should not run longer than an hour and for some children a session should be cut shorter than 1 hour.

Preparation Time. Most Upswing volunteers spent 15 to 30 minutes preparing for each tutoring session. As Table 3.3 indicates (Total column), 61% gave this estimate. The next largest group, 17%, spent from half an hour to an hour preparing for the tutoring session. Only 4% put in more than an hour per session; 11% felt that special preparation was unnecessary and 5% said they had no time to prepare. Looking at the totals for the individual cities given in the table, there are no noteworthy differences.

Figure 3.2 shows the preparation time put in by trained versus untrained volunteers. Their estimates were quite similar, although the percentage of untrained volunteers who made no preparation for one reason or another is twice the percentage of trained in that category.

TABLE 3.2

VOLUNTEER OPINION ABOUT HOW MUCH TIME PER WEEK THAT SHOULD BE SPENT IN TUTORING

Hours/Week	Denver	Oxford	St. Louis	San Francisco	Total
1 hour	4 6%	1 2%	2 4%	2 5%	9 4%
2 hours	18 28%	35 59%	29 52%	23 55%	105 47%
3 hours	30 46%	19 32%	14 25%	10 24%	73 33%
4 hours or more	13 20%	3 5%	6 11%	3 7%	25 11%
No response to question	0 0%	1 2%	5 8%	4 9%	10 5%
Total	65 100%	59 100%	56 100%	42 100%	222 100%

14. In your opinion, how much time should Upswing volunteers spend tutoring their pupils? *(your answer will help us in planning next year's program)* _____ **hours/week.**

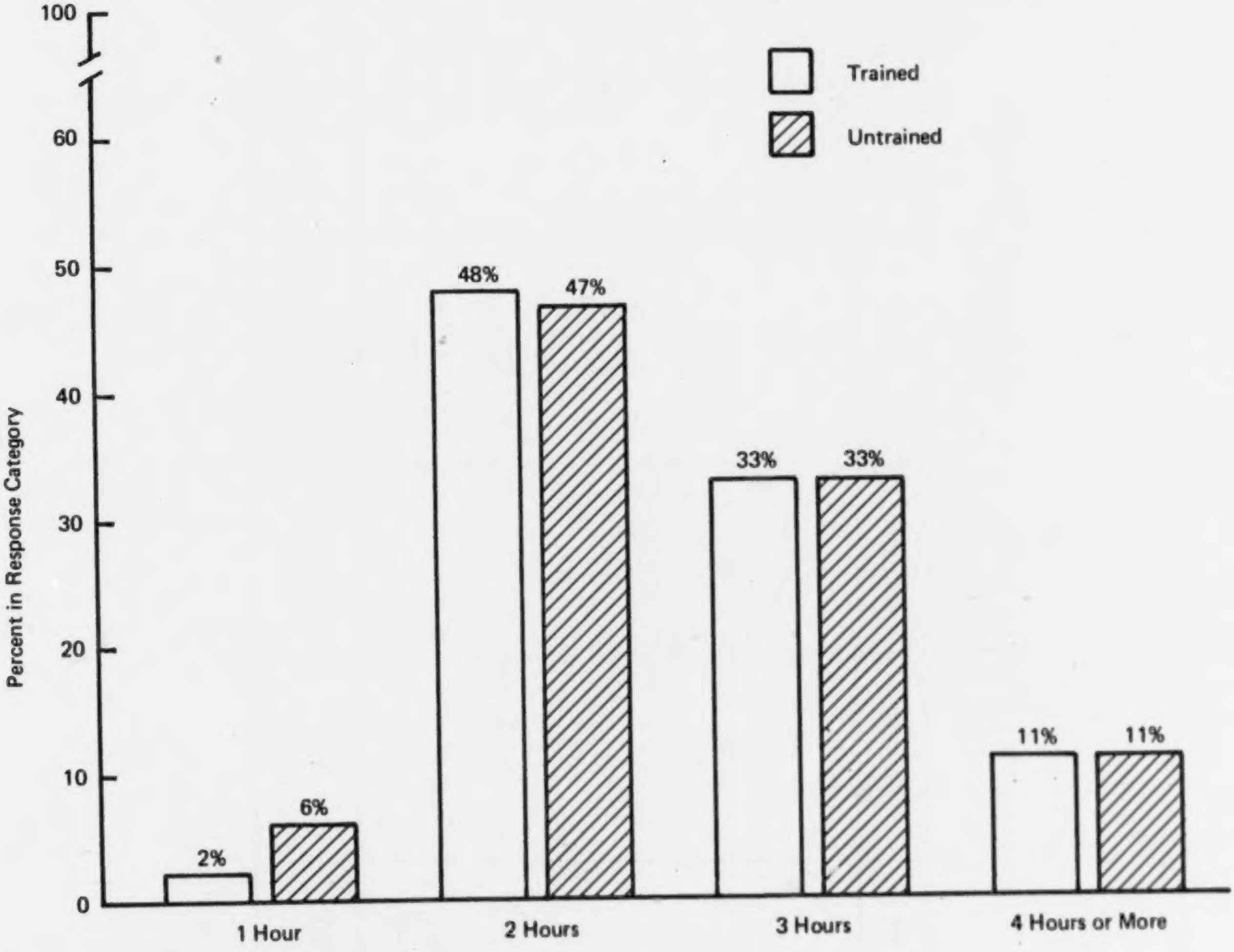
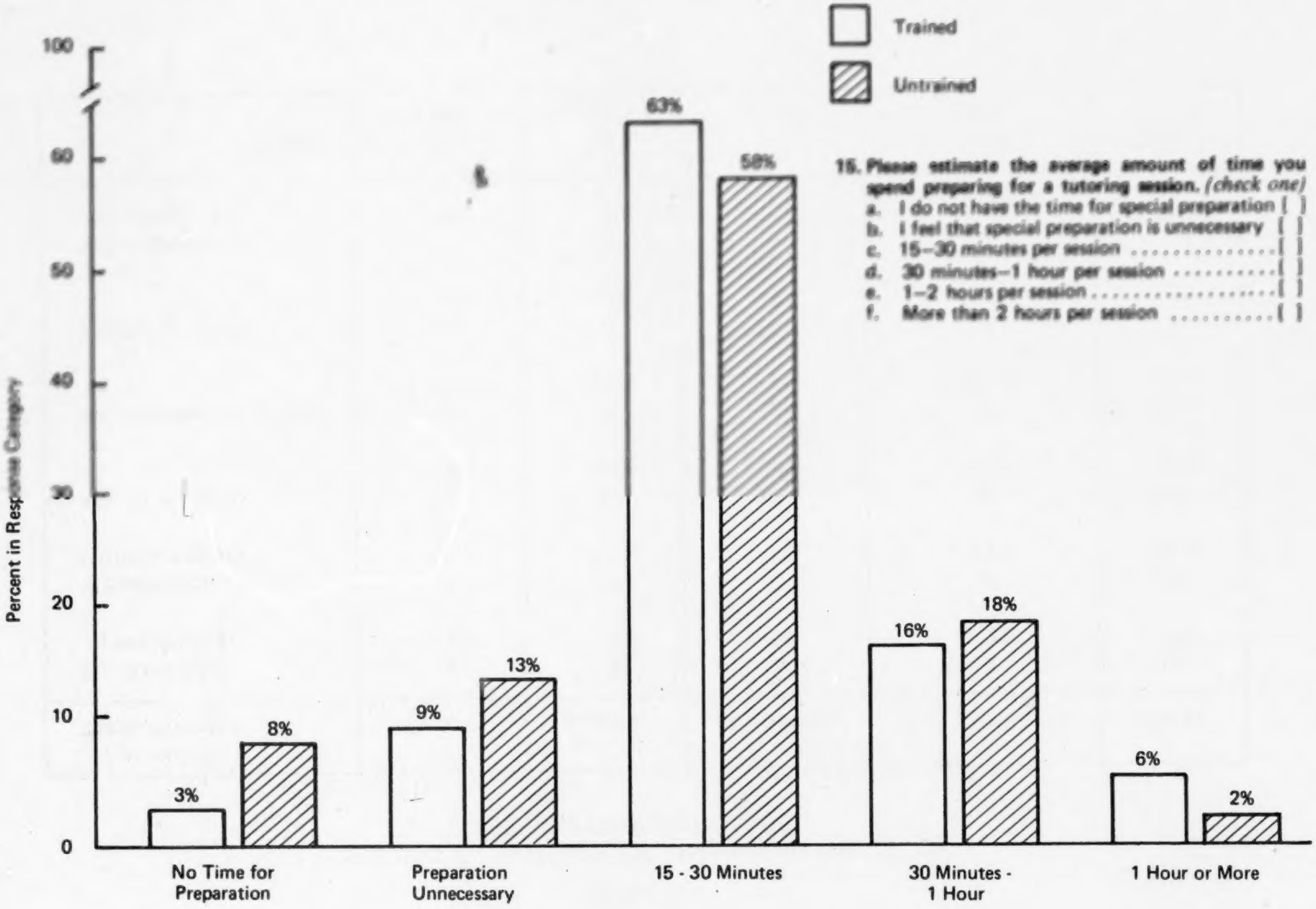


FIGURE 3.1. TRAINED AND UNTRAINED VOLUNTEERS' OPINIONS ABOUT HOW MUCH TIME PER WEEK SHOULD BE SPENT IN TUTORING, ALL CITIES
(Nonresponse to question: 6% trained, 3% untrained.)

TABLE 3.3

VOLUNTEER ESTIMATE OF TIME SPENT PREPARING FOR TUTORING SESSIONS

Amount of Time/Session	Denver	Oxford	St. Louis	San Francisco	Total
No time for preparation	3 5%	5 8%	3 5%	1 2%	12 5%
Preparation is unnecessary	7 10%	9 15%	3 5%	5 12%	24 11%
15-30 minutes	35 54%	35 59%	39 70%	26 62%	135 61%
30 minutes to 1 hour	14 21%	8 14%	8 15%	8 20%	38 17%
1 hour or more	3 5%	1 2%	3 5%	1 2%	8 4%
No response to question	3 5%	1 2%	0 0%	1 2%	5 2%
Total	65 100%	59 100%	56 100%	42 100%	222 100%



15. Please estimate the average amount of time you spend preparing for a tutoring session. *(check one)*
a. I do not have the time for special preparation [ ]
b. I feel that special preparation is unnecessary [ ]
c. 15–30 minutes per session .... [ ]
d. 30 minutes–1 hour per session .... [ ]
e. 1–2 hours per session .... [ ]
f. More than 2 hours per session .... [ ]

FIGURE 3.2. TIME SPENT BY TRAINED AND UNTRAINED VOLUNTEERS IN PREPARING FOR TUTORING SESSIONS, ALL CITIES

(Nonresponse to question: 1% trained, 1% untrained.)

From these data it appears that preparing for Upswing tutoring was not a burdensome task and that most of the volunteers made an effort to plan their work with the children. ORI believes it is undesirable for tutors to "ad lib" and for that reason considers the 15% of the total population who did not prepare too large. However, the need for preparation was stressed in all cities, and it may not be possible to secure 100% preparation.

The Tutoring Environment. The volunteers first identified the various areas in which they worked with the children. We found that 75% of all respondents used an empty room most often. The term empty room, somewhat nonspecific, refers in the main to classrooms not in use, storage rooms, nurse's office, etc. Table 3.4 (Total column) shows that 20% used a hallway and the remaining 5% tutored at the back of the classroom while the class was in session.

Though not of great significance, it is interesting to note that volunteers in Oxford, St. Louis, and San Francisco almost unanimously used empty rooms while in Denver there apparently was less available space and about half of the volunteers tutored in hallways.

Table 3.5 gives the volunteers' assessments of the adequacy of their tutoring environment. From the Total column, only a little more than half found it adequate—56%; 42% described it as inadequate. To probe the reasons for satisfaction and dissatisfaction, we cross tabulated the "adequacy" question responses with place of tutoring to find out if the opinion about adequacy was a function of place. Of the 44 volunteers who used hallways, half were satisfied and the other half were not. However, most of the 11 volunteers who used classrooms (with regular classes going on) were dissatisfied (eight or 73%). Of the 166 volunteers using empty rooms, 63 (38%) thought this arrangement inadequate and 101 (61%) thought it adequate. Two did not give an opinion. Through reveiw of questionnaire comments, most volunteers who described the tutoring enviornment as inadequate, explained this view were bothered by

TABLE 3.4

VOLUNTEERS' USUAL PLACE FOR TUTORING

Tutoring Area	Denver	Oxford	St. Louis	San Francisco	Total
Hallway	32 49%	4 7%	5 9%	3 7%	44 20%
Classroom	8 12%	0 0%	1 2%	2 5%	11 5%
Empty room	25 39%	55 93%	49 88%	37 88%	166 75%
No response to question	0 0%	0 0%	1 1%	0 0%	1 < 1%
Total	65 100%	59 100%	56 100%	42 100%	222 100%

TABLE 3.5

VOLUNTEERS' ASSESSMENT OF THE ADEQUACY OF THE TUTORING ENVIRONMENT

Opinion About Tutoring Environment	Denver	Oxford	St. Louis	San Francisco	Total
It was adequate	28 43%	33 56%	33 59%	30 71%	124 56%
It was not adequate	35 54%	26 44%	20 36%	12 29%	93 42%
No response to question	2 3%	0 0%	3 5%	0 0%	5 2%
Total	65 100%	59 100%	56 100%	42 100%	222 100%

such things as lack of a blackboard, insufficient lighting, inappropriate furniture, etc.

Table 3.5 shows a comparatively high level of satisfaction for San Francisco and a somewhat lower level for Denver. ORI has no explanation for these findings except that more Denver volunteers tutored in a hallway or in their pupils' classrooms.

Although the data are not fully conclusive, it appears that the volunteers wanted to work alone with the child, away from distractions, but that proper equipment and lighting may have been considered more important than location per se. It should be noted that adequacy or inadequacy of environment was found by the regression analysis described in Section II to have no influence on how tutoring affected the children's performance.

Availability of Tutoring Materials. According to Table 3.6 (Total column), 58% of the volunteers could always get tutoring materials when they were needed and 21% usually could obtain the necessary materials. Combining these figures, availability of tutoring materials was not a significant problem project-wide.

When the "always available" and "usually available" responses are combined, virtually no city differences are evident. In all cases, 75% to 85% of the volunteers had few or no problems locating materials.

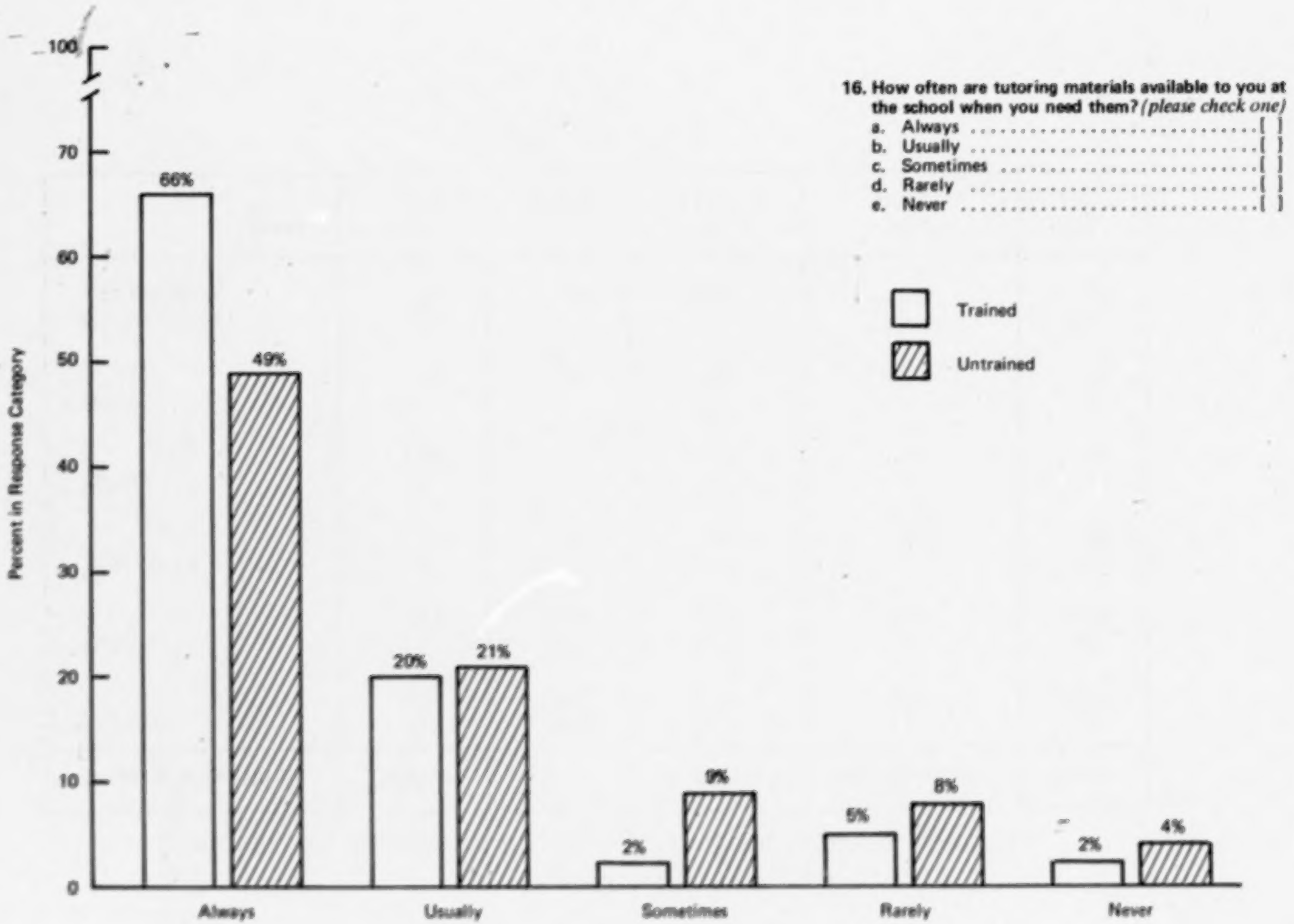
Figure 3.3 depicts how trained versus untrained volunteers described the availability of tutoring materials. Notably more trained volunteers were always able to find materials—66% as compared to 49% of the untrained. About 20% of the untrained had difficulty getting materials (available sometimes, rarely, and never), compared to 9% of the trained.

These differences were to be expected since the project put materials in each school for use by trained volunteers. Fewer or no materials were supplied for the untrained; they had to bring their own or obtain materials through their pupils' teachers.

TABLE 3.6

VOLUNTEERS' INDICATION OF THE AVAILABILITY OF TUTORING MATERIALS

Materials Available	Denver	Oxford	St. Louis	San Francisco	Total
Always	33 51%	42 71%	30 54%	24 57%	129 58%
Usually	18 28%	6 11%	13 23%	9 21%	46 21%
Sometimes	3 5%	3 5%	3 5%	3 7%	12 5%
Rarely	8 13%	3 5%	1 2%	2 5%	14 6%
Never	1 2%	2 3%	3 5%	0 0%	6 3%
No response to question	2 3%	3 5%	6 11%	4 10%	15 7%
Total	65 100%	59 100%	56 100%	42 100%	222 100%



16. How often are tutoring materials available to you at the school when you need them? *(please check one)*
a. Always ....[ ]
b. Usually ....[ ]
c. Sometimes ....[ ]
d. Rarely ....[ ]
e. Never ....[ ]

FIGURE 3.3. TRAINED AND UNTRAINED VOLUNTEERS' INDICATION OF THE AVAILABILITY OF TUTORING MATERIALS
(Nonresponse to question: 5% trained, 9% untrained.)

__Tutoring Activities.__ The volunteers were asked to estimate how much time they and the children spent over the year on several kinds of tutoring activities: reading instruction using the DISTAR materials, language development using the Peabody kit, writing and telling stories, informal activities to stimulate conversation (taking walks around school yard, etc.), practice on classwork in reading (using child's reader, workbook, etc.), practice on other skills or assignments as suggested by child's teacher, word or alphabet drill, games, reading library books, and motor activities. Table 3.7 gives these estimates separately for trained and untrained volunteers. The table indicates to what extent each activity was used, in terms of percentage of time spent on it during the year, and what proportion of volunteers used the activity.

The table shows, most importantly, that all volunteers tended to vary tutoring activities; few spent a majority of time on any one or two types. It also shows that the DISTAR and Peabody kits purchased for trained volunteers were not well utilized, particularly considering their cost. Only 37% of the trained volunteers used DISTAR at all, and of these, almost half used it no more than 10% of the time while less than a third used it more than 30%. Peabody was used by 56% of the trained volunteers, but, as with DISTAR, they devoted little time to it (32% used Peabody only 1% to 10% of the time; only 4% used it more than 30% of the time). A few untrained volunteers also worked with these materials (7% used DISTAR and 16% Peabody), but they, too, spent little time on them.

Except for utilization of these two kits, which were not intended to be available to the untrained group, there were no striking differences between the tutoring activities engaged in by trained and untrained volunteers. The trained did more commonly work on motor skills; 56% spent time on motor activities, versus 31% of the untrained volunteers. Alphabet and word drill were used by slightly more untrained volunteers—87%, compared with 76% of the trained.

TABLE 3.7

TRAINED AND UNTRAINED VOLUNTEERS' USAGE OF VARIOUS TUTORING ACTIVITIES/MATERIALS, ALL CITIES

Estimate of Time Spent (avg over year)	Percent of Trained Volunteers Using Activity/Material	Percent of Untrained Volunteers Using Activity/Material
DISTAR		
1% - 10%	17%	5%
11% - 20%	2%	0%
21% - 30%	8%	0%
31% - 40%	2%	1%
41% - 50%	4%	1%
51% - 100%	4%	0%
	37%	7%
Peabody		
1% - 10%	32%	12%
11% - 20%	9%	2%
21% - 30%	11%	1%
31% - 40%	2%	1%
41% - 50%	2%	0%
51% - 100%	0%	0%
	56%	16%
Writing/Telling Stories		
1% - 10%	48%	43%
11% - 20%	15%	11%
21% - 30%	7%	7%
31% - 40%	1%	1%
41% - 50%	1%	2%
51% - 100%	0%	0%
	72%	64%
Informal Activities to Stimulate Conversation		
1% - 10%	51%	38%
11% - 20%	7%	9%
21% - 30%	1%	2%
31% - 40%	1%	2%
41% - 50%	0%	2%
51% - 100%	0%	0%
	60%	53%

TABLE 3.7 (Cont.)

Estimate of Time Spent (avg over year)	Percent of Trained Volunteers Using Activity/Material	Percent of Untrained Volunteers Using Activity/Material
Practice on Classwork in Reading		
1% - 10%	38%	18%
11% - 20%	13%	13%
21% - 30%	12%	20%
31% - 40%	9%	11%
41% - 50%	3%	11%
51% - 100%	2%	6%
	77%	79%
Practice on Classwork in other Skill Areas		
1% - 10%	38%	35%
11% - 20%	8%	14%
21% - 30%	3%	11%
31% - 40%	4%	2%
41% - 50%	2%	2%
51% - 100%	0%	0%
	55%	64%
Alphabet and Word Drill		
1% - 10%	29%	30%
11% - 20%	21%	26%
21% - 30%	11%	13%
31% - 40%	9%	9%
41% - 50%	2%	5%
51% - 100%	4%	4%
	76%	87%

TABLE 3.7 (Cont.)

Estimate of Time Spent (avg over year)	Percent of Trained Volunteers Using Activity/Material	Percent of Untrained Volunteers Using Activity/Material
	Games	
1% - 10%	47%	43%
11% - 20%	14%	19%
21% - 30%	5%	3%
31% - 40%	2%	0%
41% - 50%	2%	3%
51% - 100%	0%	1%
	70%	69%
	Reading Library Books	
1% - 10%	55%	42%
11% - 20%	8%	14%
21% - 30%	4%	9%
31% - 40%	4%	2%
41% - 50%	1%	0%
51% - 100%	1%	1%
	73%	68%
	Motor Activities	
1% - 10%	49%	27%
11% - 20%	6%	3%
21% - 30%	1%	1%
31% - 40%	0%	0%
41% - 50%	0%	0%
51% - 100%	0%	0%
	56%	31%

Effectiveness of Teaching Methods and Materials Used. The trained volunteers had a somewhat more positive attitude about the effectiveness of the materials and methods they used with their students. From Figure 3.4, 32% of the trained as opposed to 18% of the untrained considered their approaches highly effective, while 65% and 71%, respectively, thought their methods and materials were"effective." Six percent of the trained and 9% of the untrained volunteers found their approaches to tutoring ineffective. On an overall appraisal, the questionnaire responses demonstrated general confidence and belief in the benefits of tutoring to the children.

Table 3.8 shows no major differences from city to city, although Oxford volunteers tended to show stronger confidence, more often considering their approaches highly effective, while San Francisco volunteers gave that assessment considerably less often. Although the data are not tabulated here, it was the untrained volunteers in San Francisco who felt less confident about their methods and materials (14% found them ineffective and none found them highly effective, while 0% and 21% of the city's trained volunteers gave those responses, respectively). Untrained volunteers also showed less confidence in Oxford and Denver, although not to such an extent as those in San Francisco.

Volunteers' Principal Sources of Guidance. The untrained volunteers displayed a higher level of dependency on the teachers than the trained volunteers. Figure 3.5 illustrates that 58% of the untrained, as opposed to 33% of the trained volunteers looked to teachers for their guidance. This was as expected, since the untrained volunteers were in a way, a control group, and the trained, with their preparation, were to work with a comparatively greater independence of teachers. Nevertheless, teachers were a major source of guidance for the trained group, giving them almost as much support as Upswing staff. In accordance with the project design, few untrained volunteers (14%) regarded the Upswing staff as their major source of guidance.

17. I feel that the teaching methods and materials I use as a volunteer have been:
a. Highly effective ....[ ]
b. Effective ....[ ]
c. Ineffective ....[ ]

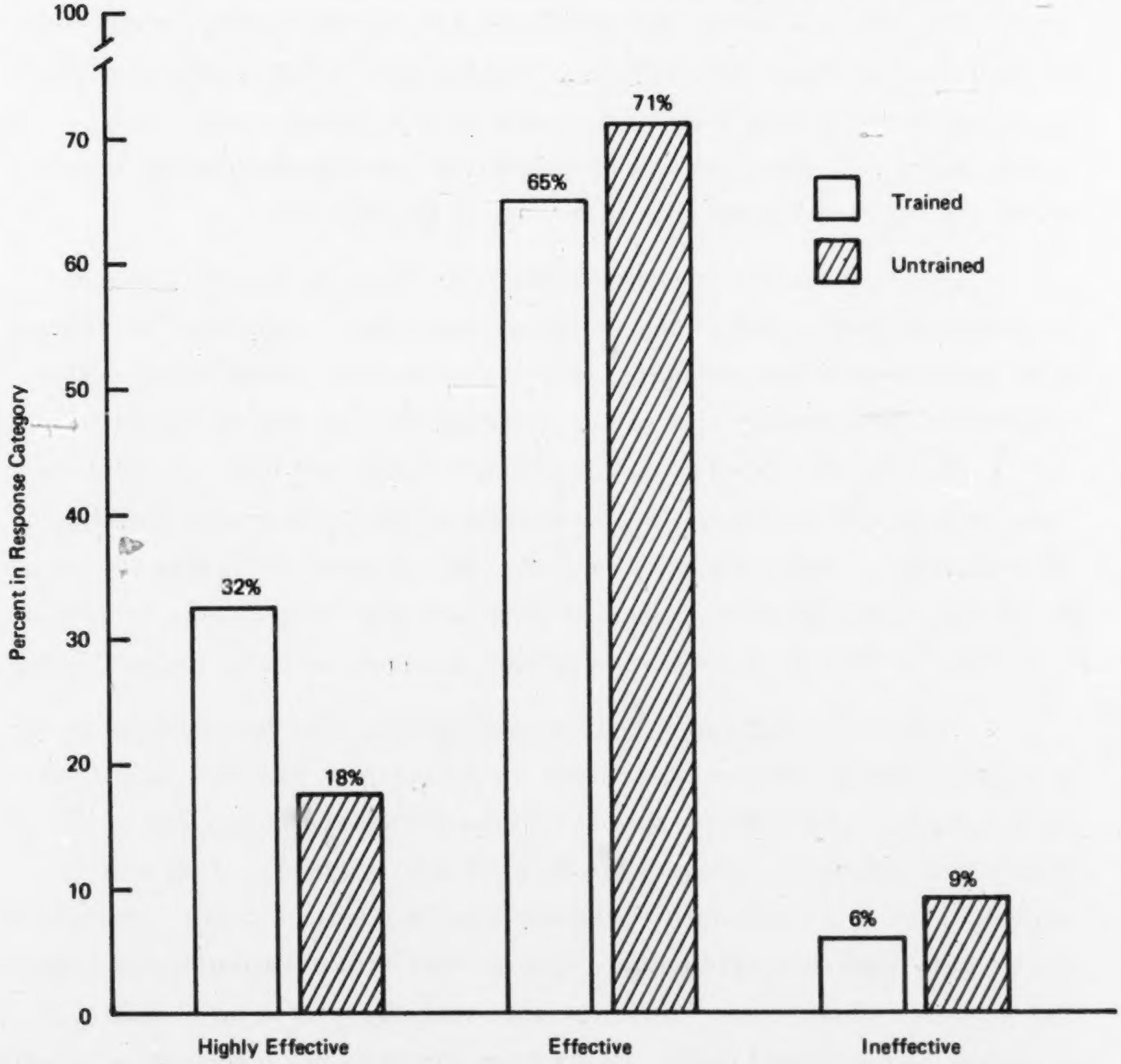


FIGURE 3.4. TRAINED AND UNTRAINED VOLUNTEERS' OPINIONS ABOUT THE EFFECTIVENESS OF THE TEACHING METHODS AND MATERIALS THEY USED, ALL CITIES
(Nonresponse to question: 3% trained, 2% untrained.)

TABLE 3.8

VOLUNTEERS' OPINIONS ABOUT THE EFFECTIVENESS OF THE TUTORING METHODS AND MATERIALS THEY USED, BY CITY

Assessment of Methods and Materials Used	Denver	Oxford	St. Louis	San Francisco	Total
Highly effective	13 20%	18 31%	13 23%	6 12%	50 23%
Effective	47 72%	35 59%	38 68%	30 71%	150 68%
Ineffective	4 6%	6 10%	4 7%	2 8%	16 7%
No response to question	1 2%	0 0%	1 2%	4 9%	6 2%
Total	65 100%	59 100%	56 100%	42 100%	222 100%

The percentages relying on "other" sources, apparently outside of Upswing, were surprisingly high. The questionnaire comments were insufficient to establish who these others were.

Table 3.9 shows that when training status is disregarded, teachers were by far the primary source of guidance for Upswing volunteers. This is reasonable since the teachers were most accessible. Reliance on Upswing staff as the primary source of guidance ran a stable 20% to 30% in all cities, when training status is disregarded. Oxford volunteers tended to rely more on teachers and on each other than did the volunteers in other cities. The Oxford project director fostered closer relationships between the trained tutors and the teachers after learning that teachers were troubled by limited contact. Greater interaction among the volunteers themselves is attributable to the size of the community.

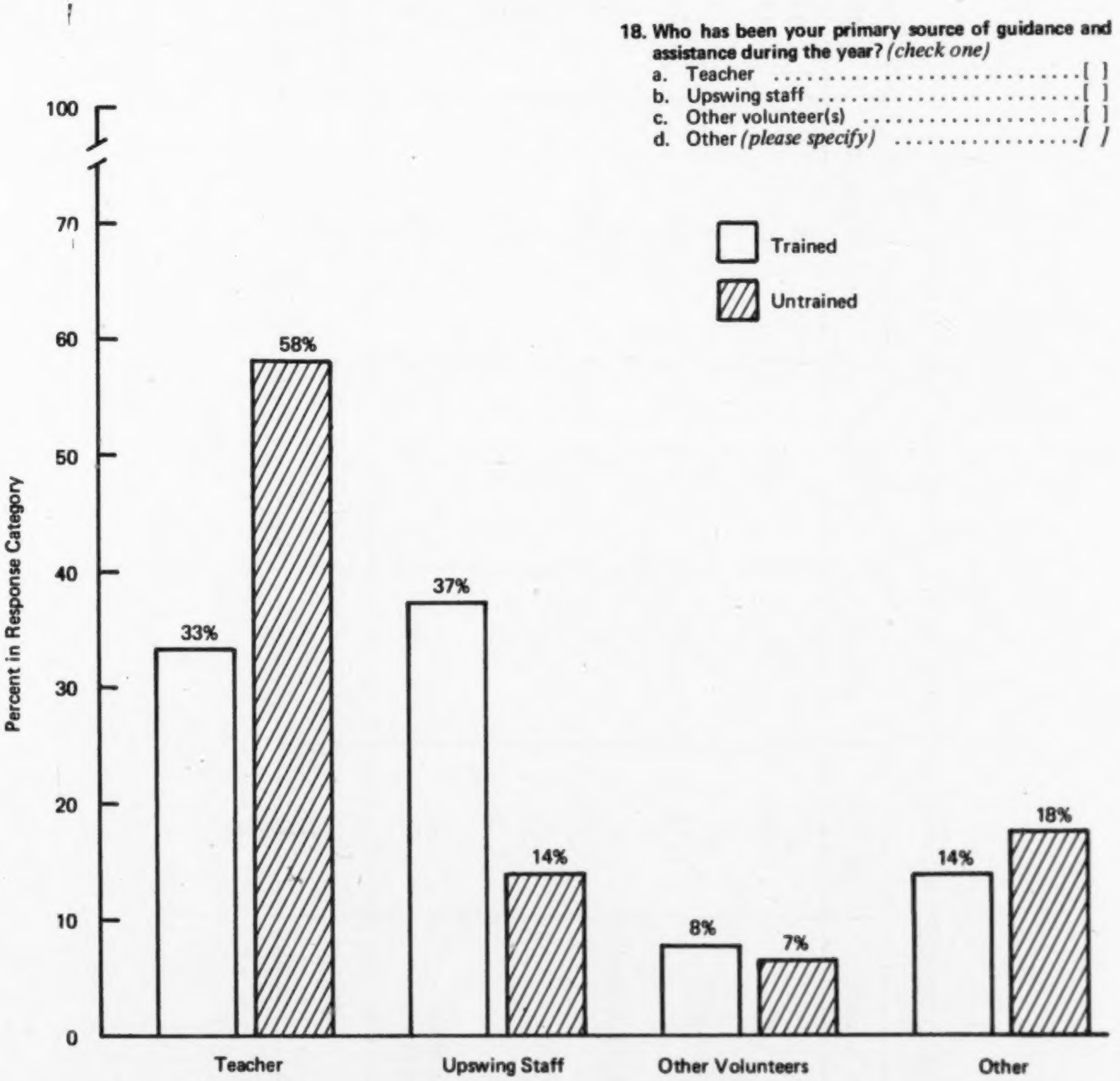
Roughly 20% of Denver, St. Louis, and San Francisco volunteers were aided primarily by "others" outside the project. The data show that untrained volunteers in San Francisco reported no assistance from Upswing staff, while only 8% in St. Louis and 16% in Denver regarded Upswing staff as their primary source of assistance. This was in line with the project design, as noted previously. One might anticipate that this lack of contact would contribute to attrition among untrained volunteers. That may have been true in San Francisco, where there were heavy losses of untrained volunteers; however, the data are inconclusive since St. Louis lost a lower percentage of untrained than any other city.

Adequacy of Guidance Received. The volunteers also were asked whether they received enough help during the year, regardless of source. Trained volunteers tended to be more content than untrained, although neither group was fully satisfied. Figure 3.6 gives the breakdown. About 60% of the trained group said they received enough help, versus 43% of the untrained.

TABLE 3.9

VOLUNTEERS' PRIMARY SOURCES OF GUIDANCE AND ASSISTANCE, BY CITY

Primary Source	Denver	Oxford	St. Louis	San Francisco	Total
Teacher	27 41%	30 51%	21 38%	19 46%	97 44%
Upswing staff	20 31%	15 25%	15 27%	9 21%	59 26%
Other volunteers	3 5%	10 17%	3 5%	1 2%	17 8%
Other	11 17%	3 5%	13 23%	8 19%	35 16%
No response to question	4 6%	1 2%	4 7%	5 12%	14 6%
Total	65 100%	59 100%	56 100%	42 100%	222 100%



18. Who has been your primary source of guidance and assistance during the year? *(check one)*

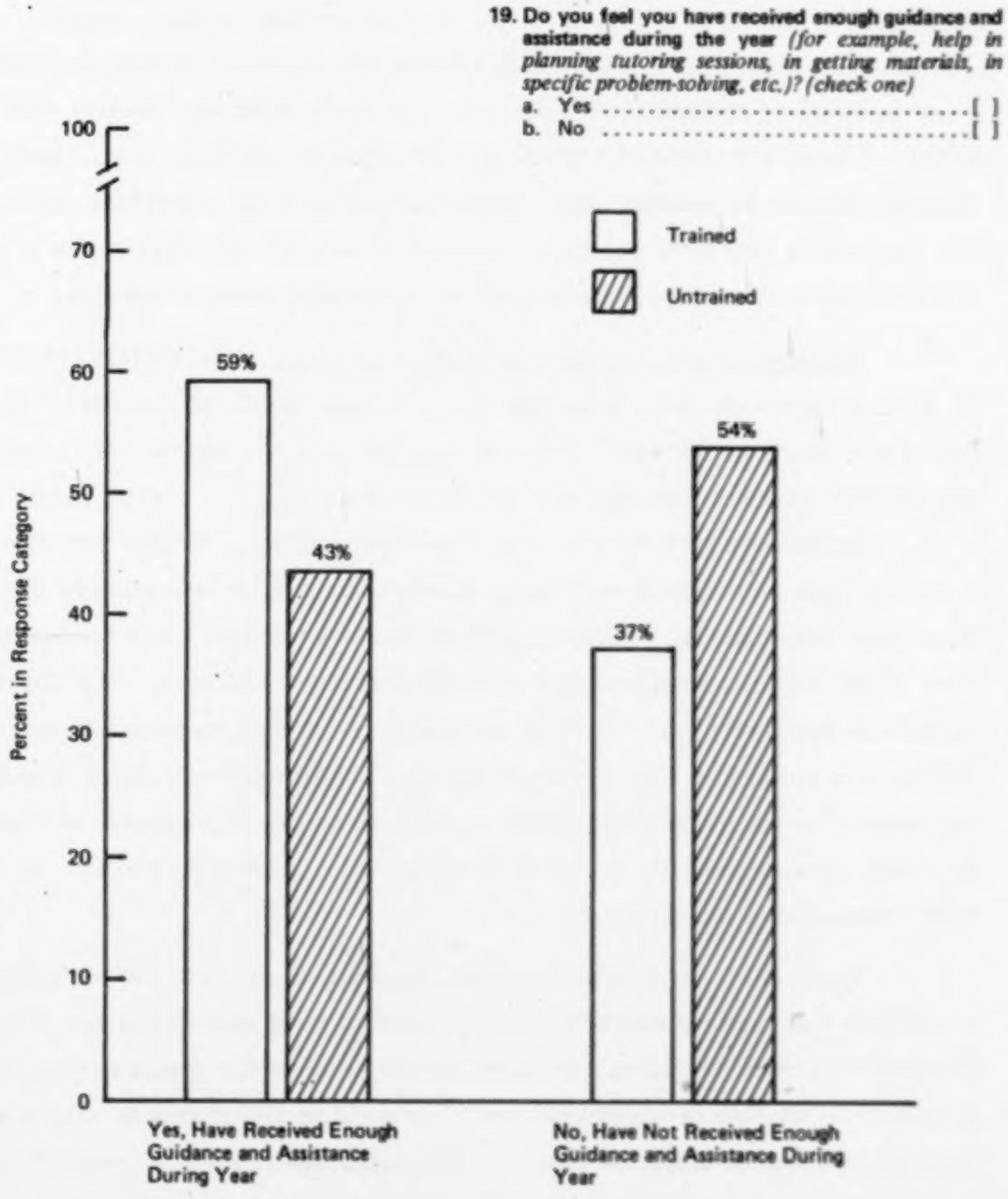
a. Teacher .... [ ]

b. Upswing staff .... [ ]

c. Other volunteer(s) .... [ ]

d. Other *(please specify)* .... *[ ]*

FIGURE 3.5. TRAINED AND UNTRAINED VOLUNTEERS' PRIMARY SOURCES OF GUIDANCE AND ASSISTANCE DURING YEAR, ALL CITIES (Nonresponse to question: 8% trained, 3% untrained.)



19. Do you feel you have received enough guidance and assistance during the year *(for example, help in planning tutoring sessions, in getting materials, in specific problem-solving, etc.)? (check one)*

a. Yes ....[ ]

b. No ....[ ]

FIGURE 3.6. TRAINED AND UNTRAINED VOLUNTEERS'ASSESSMENT OF ADEQUACY OF GUIDANCE AND ASSISTANCE RECEIVED DURING YEAR, ALL CITIES
(Nonresponse to question: 4% trained, 3% untrained.)

ORI believes that support to volunteers on a continuing and ready basis may be the most important factor in a successful tutoring project. Checking the comments made by both trained and untrained volunteers, we found feelings of personal inadequacy or insecurity common. Nearly 50% of the volunteers mentioned a need for more specific training, i.e., more training specific to problems they encountered with their individual pupils. This translates into more personal guidance or assistance and/or more inservice training that includes opportunity for individual problem-solving.

Preferred Kinds of Guidance and Assistance. Volunteers were asked for their preferences about help both from Upswing staff and teachers. The question relating to Upswing staff was open-ended. By far the most commonly expressed preference was for help in diagnosing a specific child's needs and/or planning tutoring activities to meet the child's needs. Oxford was an exception here, perhaps because the Upswing staff there was already giving diagnostic help and, as mentioned before, more volunteers there tended to have closer working relationships with the children's teachers. The Oxford volunteers suggested that the staff arrange a pretutoring meeting between teacher and volunteer, and a meeting (at some time) between parent(s) and volunteer; provide information about the child's family background; arrange idea-sharing meetings of volunteers; provide more materials; and set up classroom observations for volunteers.

In regard to help from teachers, the volunteers were given the same list of types as was presented to the teachers in their questionnaire. Table 3.10 indicates the order of preference in which they ranked the listed items. In general they showed greatest preference for nondirective forms of help and least preference for directive forms. Comparison of Table 3.10 with Table 3.18 in the analysis of teacher impressions shows that what volunteers wanted from teachers turned out to be what teachers were most willing to give. Their priorities were the same.

TABLE 3.10

KINDS OF GUIDANCE AND ASSISTANCE TRAINED AND UNTRAINED VOLUNTEERS PREFER TO GET FROM TEACHERS*

Rank	Kinds of Guidance-Assistance
1	Discussions with teacher about child's progress and problem areas
2	Discussions with teacher to coordinate activities
3	Teacher suggestions about tutoring materials
4	Teacher help in locating tutoring materials
5	Regular teacher quidance in planning for tutoring sessions
6	Regular assignment of tutoring activities by teacher

* More than one-third of the volunteers did not respond correctly to the question or skipped it.

Note that more than a third of the volunteers either did not answer the question about preferred forms of teacher aid correctly or skipped it. The views of these people could change the ranking. It also should be noted that volunteers as well as teachers generally ranked the items in the order in which they appeared on the questionnaire. This brings up the possibility that even those who completed the ranking successfully may not have understood what they were to do or that they may have been influenced by the arrangement of items on the form. From interview remarks, however, ORI believes that volunteers in fact generally preferred guidance and not explicit direction from teachers; thus the ranking as presented in Table 3.10 would be representative.

Factors Considered Most Important to Effective Tutoring. Table 3.11 shows how both the trained and untrained volunteer tutors ranked five additional variables according to their importance to tutoring success. Both groups gave "day-to-day experience with child" first priority. Beyond this point of agreement the trained volunteers considered training in tutoring techniques and use of materials more important than other forms of experience, namely, previous experience with children in same age group and previous work as a tutor. They considered a close working relationship with the child's teacher least important, probably because they had been schooled to independence in Project Upswing.

The untrained tutors considered previous experience with children in the same age group as second most important and the volunteer-teacher relationship as third, consistent with their greater actual dependency on teachers as previously described. Thus these data suggest that training does make a difference in volunteers' attitudes about what counts in effective tutoring. However, the rates of nonresponse to this question, as to all the ranking questions on the form, were high, although about equal for trained and untrained volunteers (25% and 28% respectively). It is possible that the views of the nonrespondents would have caused shifts in the priorities just described.

TABLE 3.11

RANKING OF FACTORS IMPORTANT TO BEING AN EFFECTIVE UPSWING TUTOR

(No response to question: 25% trained, 28% untrained.)

Factor	Priority According to Trained Volunteers	Priority According to Untrained Volunteers
Day-today experience with child	1	1
A close working relationship with the child's teacher	5	3
Training in techniques and materials for tutoring	2	4
Experience working with children in age group	3	2
Previous tutoring experience	4	5

Volunteer Comments About Project Organization and Operations

- Tutoring Time -

"More time might inconvenience the schools a bit too much."

"This should be individualized according to child, the need and teachers' desire."

"I support the 2 hours weekly because it doesn't take the child out of the classroom too often."

- Tutoring Environment -

"Better teaching areas would have been a big help. Sitting in a closet or a noisy lunchroom didn't help much. But, it was better than nothing."

"We were disturbed constantly and told to move if someone else needed space."

"Too much interference. Had to seek out different quiet places."

"Too numerous to enumerate (problems with tutoring environment). Name it and it existed."

- Materials -

"I did not know till program ended that materials were supplied."

"I'll assume materials were always available; however, most of the time I used my own materials."

"I did not find the materials provided very useful, but they seemed to be readily available."

"All of these tutoring materials were good background but there wasn't enough time to really learn enough to put them to the correct use."

"Few materials were suggested which held this child's interest."

(Volunteer Comments About Project Organization and Operations, Cont)

- Guidance -

"I didn't receive much guidance from anyone."

"I definitely feel that the child's teacher should give guidance."

"I would like to have more help in ... planning tutoring sessions."

"Assistance was always available, though I did not take advantage of it as I should have."

"I think the assistance given this year was sufficient."

"Guidance insufficient simply because I did not seek it."

"I found it difficult to get someone at the Upswing office to talk with when I had my one and only problem."

"Upswing is a good idea. The staff was ill-prepared. It was impossible to guide the volunteers when they did not know what they were doing themselves."

"I had not expected the teacher to demand so much time spent in one area."

"If a volunteer is to be effective and helpful I feel that a teacher should not have to coach a volunteer too much. A teacher has other pupils to cope with, but cooperation is certainly desirable."

- Factors Most Important to Effective Tutoring -

"I think the most important factor is to let the child know you are interested in his progress."

"Genuine interest and concern for child."

"Facilities that limit distractions."

"I feel it might be helpful if the tutor could meet the parents and know more about the child's background and home life."

Training

General assessments of training (preservice) and orientation obtained from the "First Impressions Questionnaire" responses of both trained and untrained volunteers were presented in Volume I, Section V (page 5-12 ff.). The final questionnaire followed up on this with more specific questions for trained volunteers only.

The first of these questions was open-ended so as not to limit the volunteers' ideas. They were asked to state the topics they considered most important to cover in Upswing training. The following statements summarize the most common suggestions:

- Description of basic reading skills and how to teach them (including introduction to the reading program(s) used in the schools, which was considered very important by many volunteers; language experience approach; phonics; basic vocabulary for beginning readers; how to teach reading comprehension; more thorough training in how to use DISTAR and Peabody, if they are to be used in the project).
- Appropriate books for Upswing children and first-graders in general
- Review of appropriate games and other techniques and materials (a variety of alternatives), where to get them, how to use them
- Description of learning and other behavioral characteristics of first-grade children in general and children who have learning difficulties in particular (i.e., what to expect from the children, including what is expected of them in classroom performance)

- Techniques of managing behavior (including, particularly, how to spark and hold interest, "get the child to listen"; how to use behavior modification)
- Techniques helping a child develop self-confidence
- Suggestions on how to establish communication with the child, including how to overcome language barriers and cultural differences
- Review of diagnostic techniques and methods of ongoing evaluation of tutoring efforts
- Suggestions of how to handle specific learning difficulties (preferably as they arise with individual children).

Dissatisfaction was not expressed by a majority of volunteers about any aspect of Upswing training. When dissatisfaction was expressed, most commonly it was with coverage of DISTAR and Peabody. As noted in the analysis of techniques and materials used by volunteers, these were not favored as much as had been anticipated. Volunteers frequently did not care for the DISTAR approach or felt insufficiently versed in how to apply it; some found their pupils did not like it. The most frequently given reason for not using Peabody was that the Level I kit bought for Upswing was too elementary for the child as the year progressed.

A high rate of nonresponse to the question probing attendance at inservice training limits analysis. The 16% nonresponse is difficult to interpret. It may be that they did not attend, could not remember which sessions were preservice and which were inservice, or did not understand the terms. From Figure 3.7, 60% attended more than half the training sessions with 20% attending less than half; 4% attended none of the sessions. We experienced a similar

35. How many inservice training sessions did you attend? _____ sessions

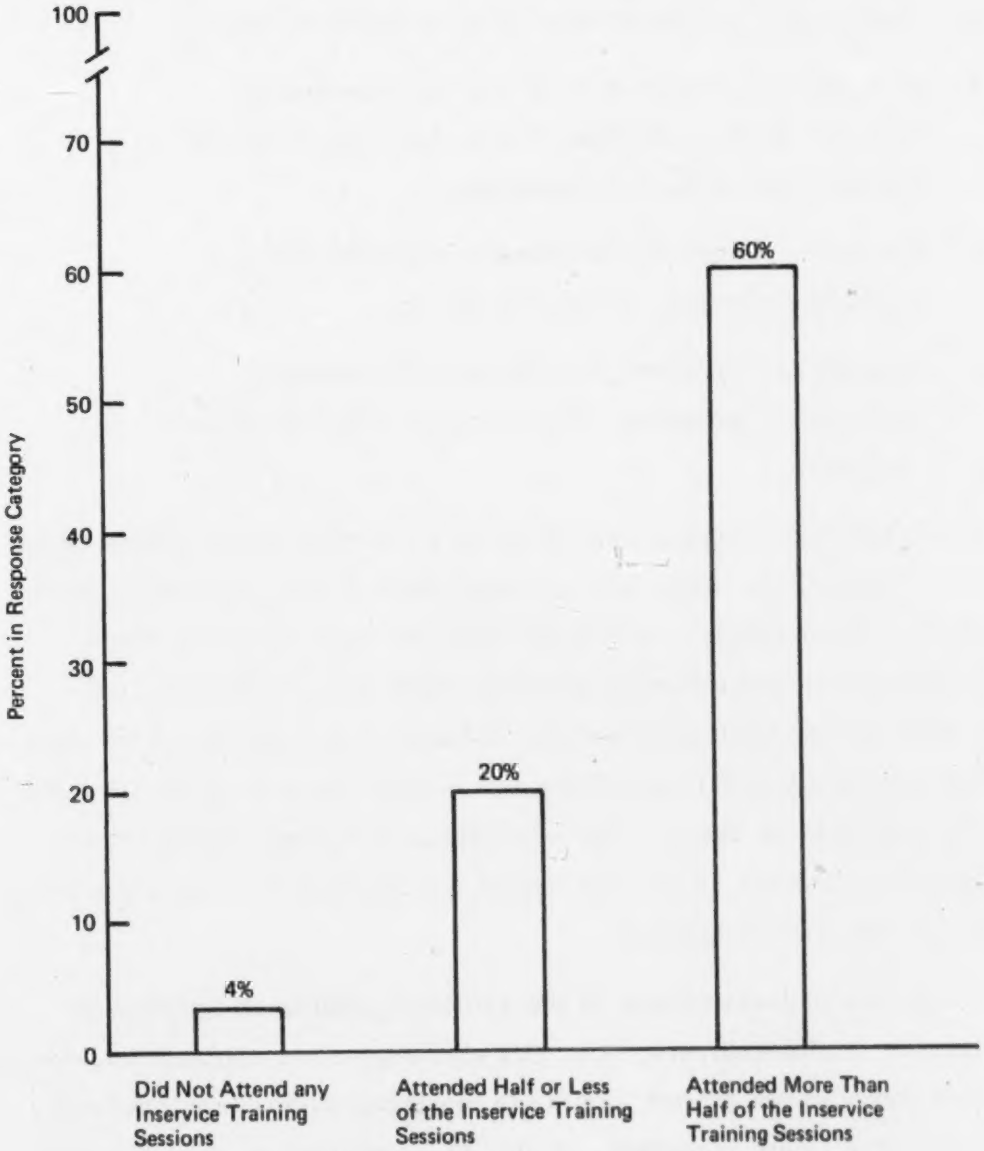


FIGURE 3.7. TRAINED VOLUNTEERS' ATTENDANCE AT INSERVICE TRAINING SESSIONS (Nonresponse to question: 16%.)

problem with high nonresponse rates for the question about quality of inservice training (Figure 3.8). Aside from the 15% not responding, 43% thought the inservice training was good, 37% described it as fair, and 5% said it was poor.

Neither the attendance rates nor the assessments suggest great enthusiasm for the inservice sessions, which may have had something to do with the time of year (most sessions were offered in the late spring). Questionnaire comments were insufficient to explain why beyond suggesting that there might have been a tendency for volunteers to take up too much time with anecdotes, and that some sessions (for example coverage of phonics) came too late to be as valuable as they might have been.

Volunteer Comments About Training

> "I feel strongly that each volunteer should be given training. In my particular situation, given my particular student, the lack of training was not detrimental. However, I think generally speaking, I would feel more secure, were I better armed with recognized tools and techniques to supplement my own intuition."
>
> "Expected better training."
>
> "I feel Melvin would have made more progress with a trained experienced tutor."
>
> "This program was very valuable to me but with more training or perhaps more experience in teaching I could have helped Betty more."
>
> "I feel that the greatest improvement which could be made in the training of volunteers would be to have it geared toward the 'one-to-one' approach. Even though our training was good, it always pertained to a whole classrooms or to a group."
>
> "The university training program was very helpful prior to start of tutoring in fall."

36. How would you rate the inservice training? *(check one)*

a. Good ....[ ]
b. Fair ....[ ]
c. Poor ....[ ]

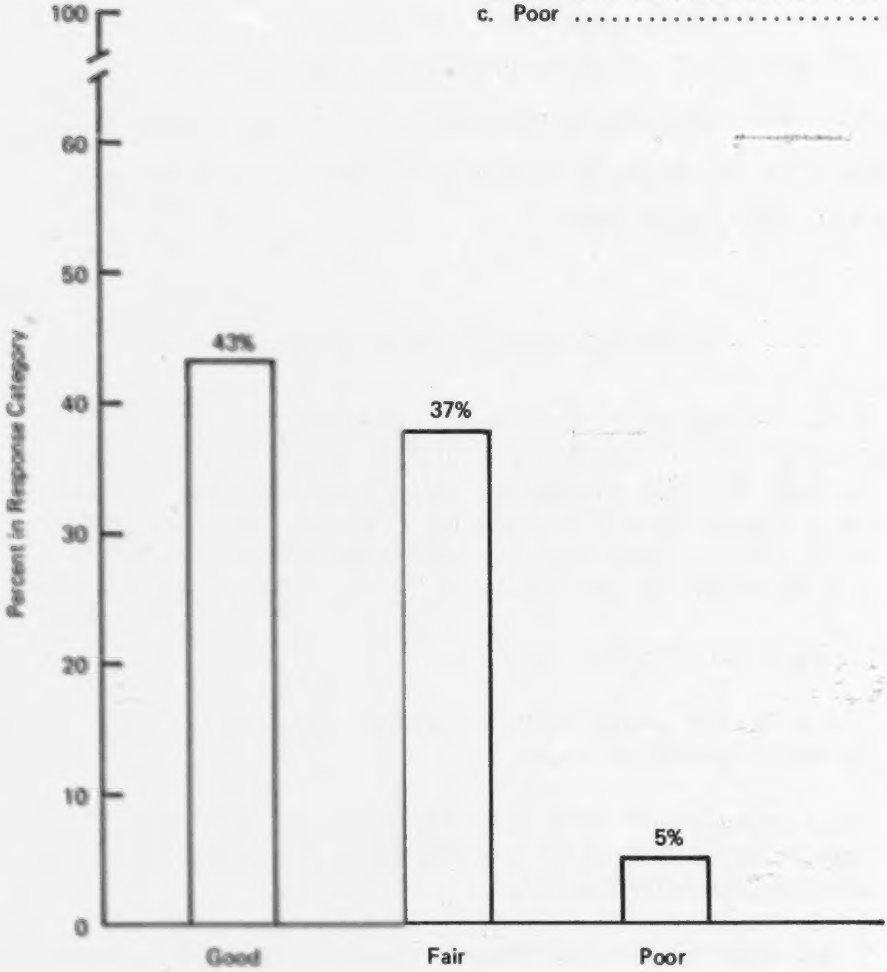
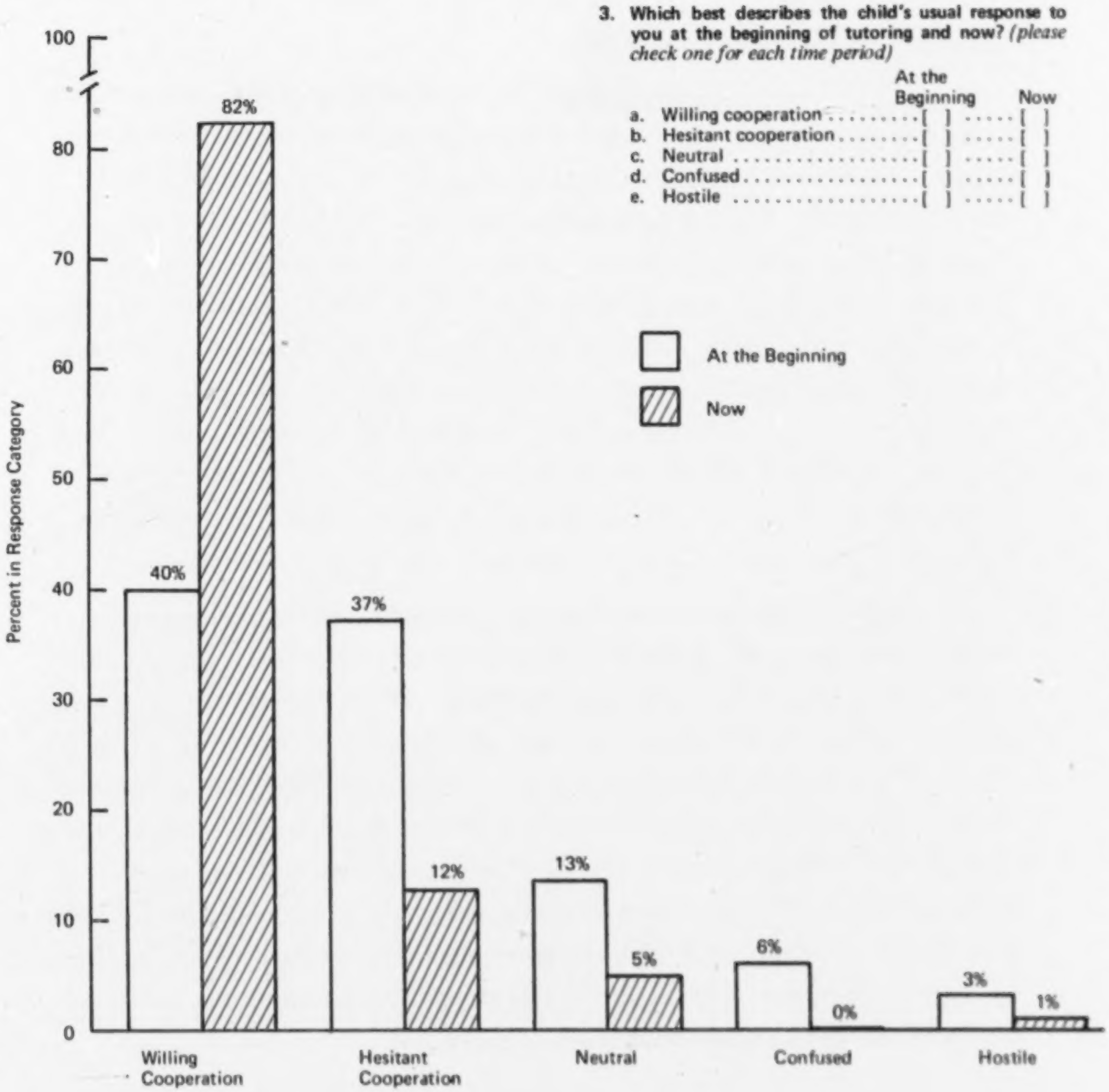


FIGURE 3.8. TRAINED VOLUNTEERS' RATING OF THE INSERVICE TRAINING SESSIONS (Nonresponse to question: 15%.)

Relationships of Project Participants

Volunteer-Pupil Relationship. On the final questionnaire the volunteers noted a definite shift in the children's responses to them over the tutoring period. Trained and untrained volunteers responses were combined for Figure 3.9 since they were not significantly different. The figure shows that the percentage of children found to give "willing cooperation" doubled from the beginning to the end of tutoring (40% "then,"—82% "now"). Following the trend of increasing cooperation, only 12% of the students were described as showing "hesitant cooperation" by the end of tutoring as opposed to 39% at the beginning. Five percent showed neutrality and only 1% (one child) appeared hostile. Thus the figure shows both improved relationships and close to 100% confidently happy relationships by the end of tutoring. It also shows that there were few serious problems between volunteers and their pupils even at the beginning.

Figure 3.9 makes an interesting comparison with Figure 5.8 in the Volume I description of volunteers first impressions of Upswing. In the latter illustration, the data were broken out by training status to establish the similarity of the two groups of volunteers. The data were taken from responses to a question about child's initial response to tutor. Comparison shows that in the retrospective assessment of beginning versus now, volunteers tended to give a lower assessment of initial response than they gave originally. This was to be expected since the final questionnaire item obviously was intended to determine whether the volunteer-child relationship changed over the year. Also, of course, as the two got to know each other the volunteer's assessment of the warmth of the child's initial response might have changed.



3. **Which best describes the child's usual response to you at the beginning of tutoring and now?** *(please check one for each time period)*

	At the Beginning	Now
a. Willing cooperation	☐	☐
b. Hesitant cooperation	☐	☐
c. Neutral	☐	☐
d. Confused	☐	☐
e. Hostile	☐	☐

FIGURE 3.9. VOLUNTEERS' DESCRIPTIONS OF CHILDREN'S RESPONSES TO THEM AT THE BEGINNING OF PROJECT, AND NOW
(1% (two volunteers) did not make a judgment about initial response.)

The volunteers' view of how their pupils felt about missing class activities for the tutoring sessions also points to good child-volunteer rapport. From Figure 3.10, 64% of all volunteers who returned questionnaires thought their pupils considered tutoring a special treat. The 21% who found the children willing, although not enthusiastic, make a total of 85% who felt the children were at least interested in attending the sessions. Only 4% found their pupils reluctant to miss class activities, while 2% thought their pupils were embarassed to be singled out and 8% responded with "don't know."

A number of children were tutored during their recess time during the first year of Upswing. This was an unfortunate circumstance that would likely make a child reluctant to leave his class for tutoring. It is evident from Figure 3.10 that being singled out would rarely embarrass a child so young, as it might an older child. Project-caused ego damage is apparently not a significant concern.

Both trained and untrained volunteers generally felt the children responded well to tutoring activities. Figure 3.11 indicates that 74% of the trained volunteers found their pupils eager, 20% found their pupils neutral, and 6% thought theirs tended to reject tutoring activities. By comparison, the untrained volunteers felt that 66% of the children were eager to undertake activities, 29% were neutral, and 4% responded negatively.

These data suggest that trained volunteers may have found their pupils slightly more responsive, but the difference is not clearly established. Based on tutoring outcomes, ORI considers this possibility insignificant. The most important point about the data in Figure 3.11 is that they give another indication of strongly positive tutoring relationships and volunteers ability to excite children's interest in learning-related activities.

Language barriers complicated about 18% of child-volunteer relationships project-wide (Table 3.12). Denver registered the [illegible]vest such communications problems—8%, probably between Spanish-speaking children and non-Spanish-speaking volunteers. In Oxford, 24% of the volunteers noted a language

4. How does the child seem to feel about missing class activities for the tutoring session? *(check one)*

a. Considers it a special treat ....[ ]
b. Willing but not enthusiastic ....[ ]
c. Reluctant to miss class activities ....[ ]
d. Embarassed to be singled out ....[ ]
e. I don't know ....[ ]

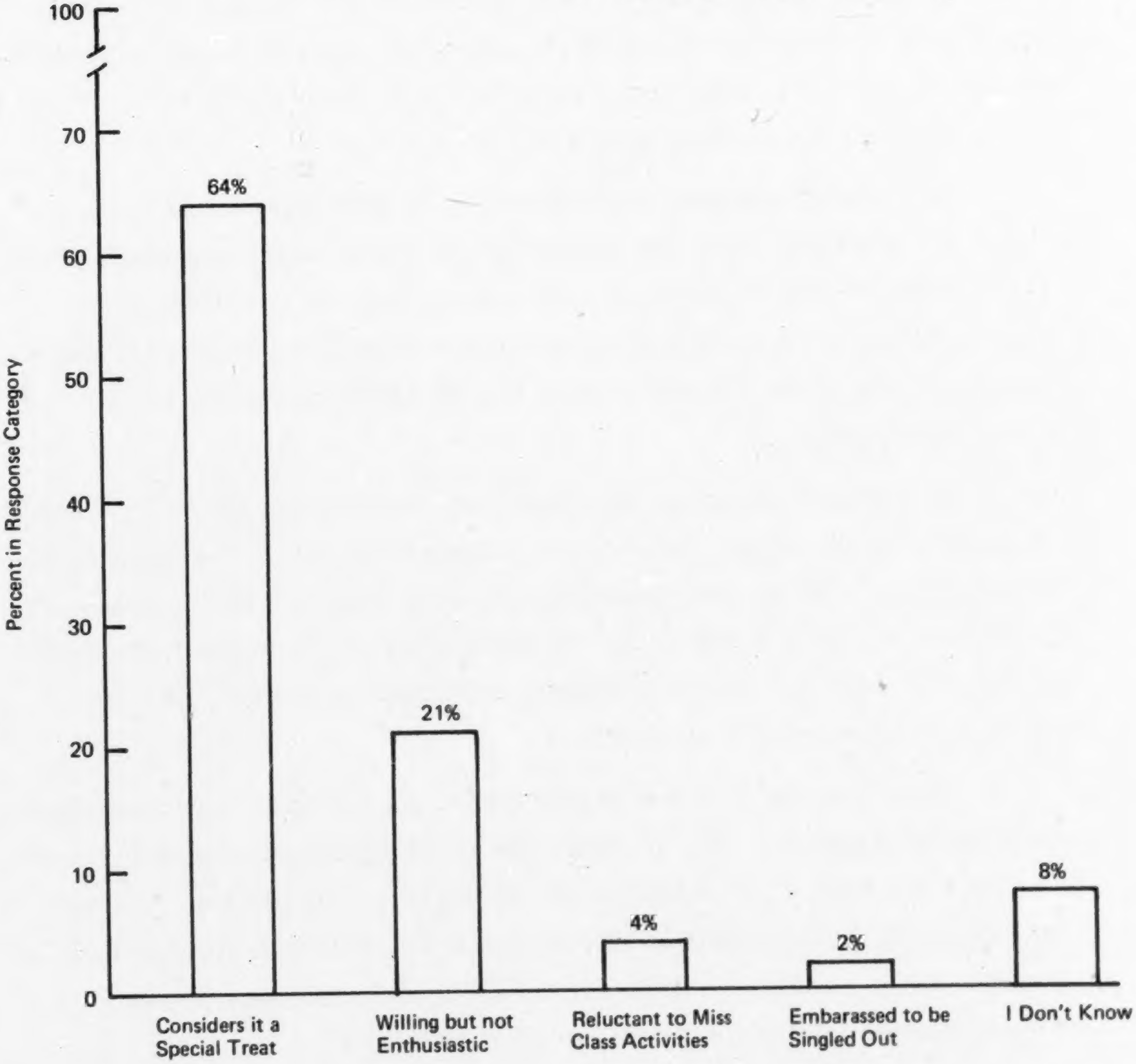


FIGURE 3.10. VOLUNTEER ASSESSMENT OF HOW CHILD FELT ABOUT MISSING CLASS ACTIVITIES FOR TUTORING SESSIONS (Nonresponse to question: 2%.)

2. **What is the child's usual response to tutoring activities?** *(check one)*
   - a. Negative ....[ ]
   - b. Neutral ....[ ]
   - c. Eager ....[ ]

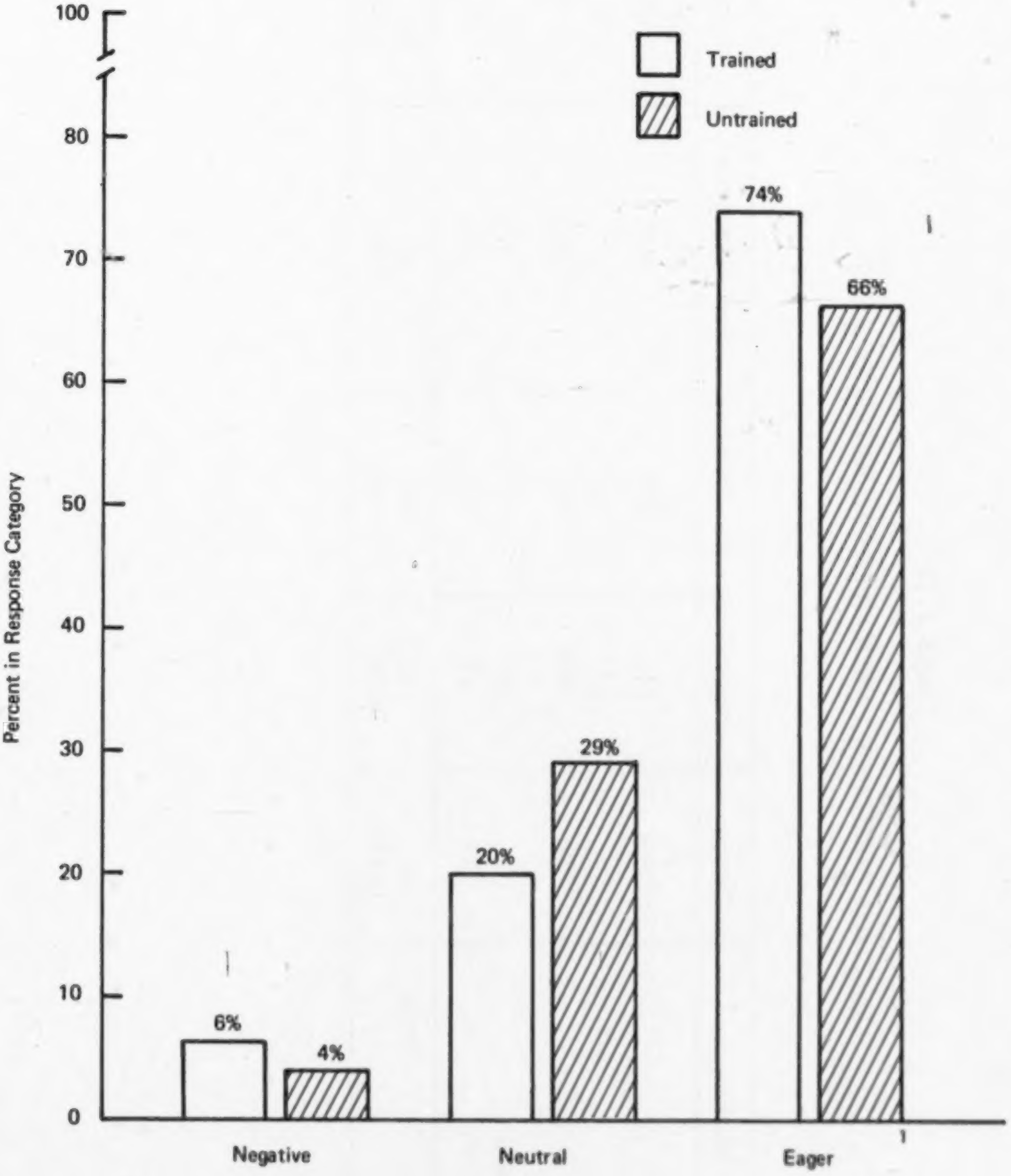


FIGURE 3.11. TRAINED AND UNTRAINED VOLUNTEERS' ASSESSMENTS OF CHILDREN'S USUAL RESPONSE TO TUTORING ACTIVITIES (Nonresponse to question: 1% untrained.)

TABLE 3.12

LANGUAGE BARRIERS BETWEEN CHILDREN AND VOLUNTEERS

Language Barrier	Denver	Oxford	St. Louis	San Francisco	Total
Yes	5	14	11	11	41
	8%	24%	20%	26%	18%
No	58	45	45	31	179
	89%	76%	80%	74%	81%
No response to question	2	0	0	0	2
	3%	0%	0%	0%	1%
Total	65	59	56	42	222
	100%	100%	100%	100%	100%

barrier. This percentage is probably a comment on communications problems between children from rural homes whose parents have relatively little formal education and upper-middle-class volunteers who are college graduates. Similar socioeconomic differences probably account for the 20% of language barriers reported by St. Louis volunteers, but in this case the children were from the inner city. Twenty-six percent of San Francisco volunteers were troubled by language barriers, probably related to Spanish-speaking and Chinese-speaking children.

To trace further the effects of existing language barriers, ORI cross tabulated these results with volunteer assessments of change in the children's willingness to express themselves orally. Of the 41 volunteers who described their pupils as having this obstacle in communication with them, 11 noted moderate gains in oral expressiveness; 10 children continued to have difficulty and 19 were described as never having had a problem. The measurement of the child's communicativeness is related more to the concept of shyness than to skill. It appears that for about half of these children, language differences did not translate into reticence. The data do not show, of course, whether greater communicativeness on the part of a quarter of the children who had to deal with language differences was attributable to increased command of standard English, to growing rapport with the tutor despite language differences, or to other factors.

Language varriers do not appear to have interfered significantly with child-volunteer relationships. However, language differences may have influenced volunteer assessments of change in children's reading skills, in Oxford and San Francisco, as discussed in Section II.

Volunteer Comments About Their Relationships With Pupils

"I was not really able to get to my child. He does not understand why I am helping him."

"He felt through my encouragement as though he would be ahead of others in the class by practicing."

"It was a challenge to overcome Harry's confusion and hostility and a feeling of success was developed as Harry seemed to enjoy our session together as time went on."

"Other children in the class have asked me if they can have a tutor."

"He was bored in class. He liked anything better."

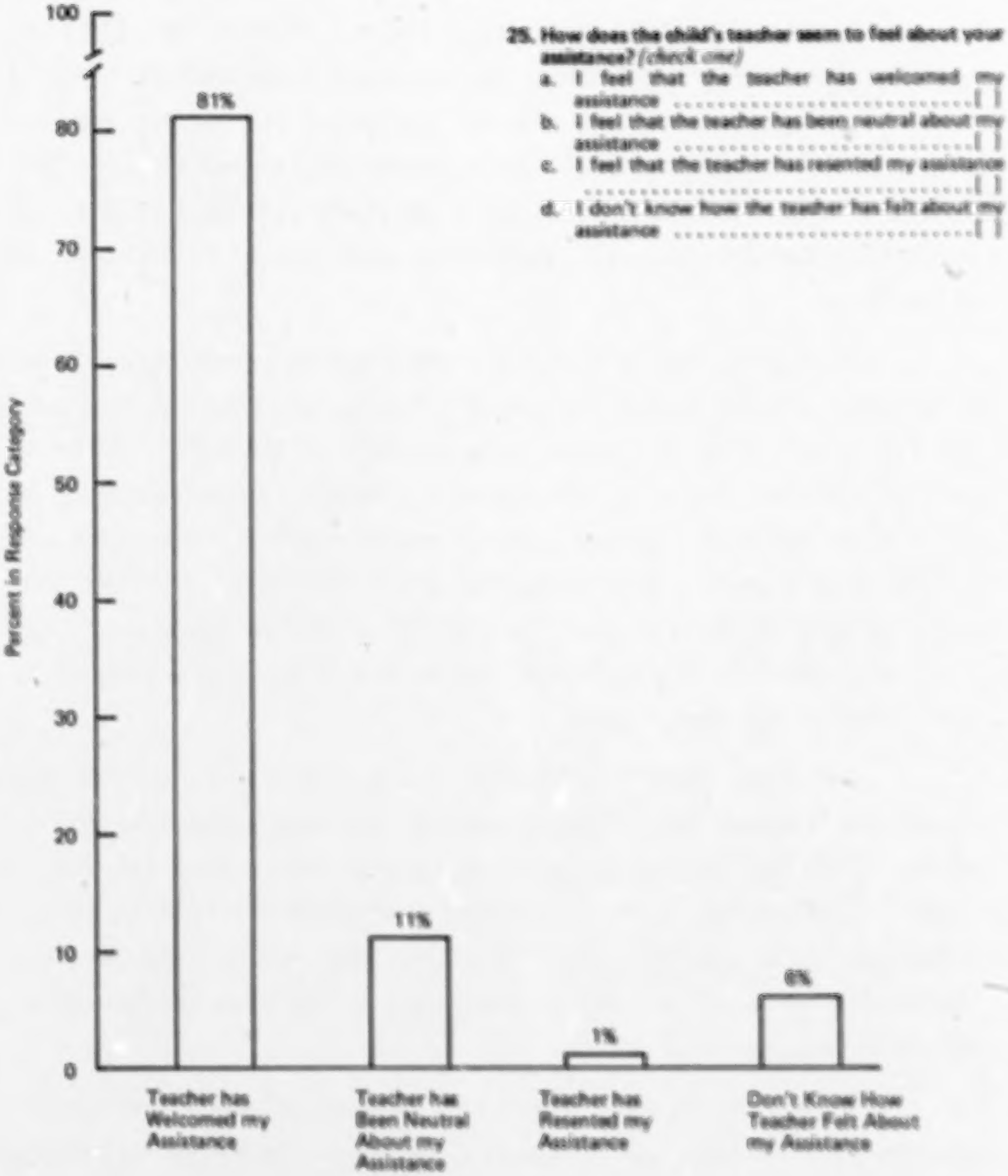
Volunteer-Teacher Relationship. Figure 3.12 shows that 81% of the volunteers felt that their assistance was welcomed by the teachers, while 11% found the teachers neutral. Only 1% (two volunteers) felt teachers resented their assistance. Six percent of the volunteers said they did not know how the teachers felt about them. This can be attributed to limited contact, since lack of opportunity to talk was a problem commonly noted by both volunteers and teachers.

These data point to volunteer-teacher rapport, which generally seems to have been the rule despite the possible differences of opinion, clashes in methods of instruction, and sense of competition that are often problems in in-school tutoring programs. ORI has been continually impressed by the good will of those involved in Project Upswing and their steady focus on the goal of helping the children. It is noteworthy in this context that more teachers evidently were dissatisfied than conveyed that feeling to volunteers. Figure 3.23, presented later in this section, shows 22% of teachers not wanting to work with Upswing tutors again.

Comparing Figure 3.12 to Figure 5.9 in Volume I, virtually no change occurred in volunteer perceptions of teachers' attitudes over the tutoring period. (Note that the populations of respondents are not identical; still the trends are comparable). From the original distribution of responses (Figure 5.9), which were highly positive, the relationships could only have deteriorated. That did not occur, at least in the opinion of volunteers who remained in the project through March 31, 1972.

In Figure 3.13, about 80% of both trained and untrained volunteers received some guidance from their pupils' teachers. (As discussed previously, untrained volunteers worked more closely with teachers than trained.)

Their preferences about teacher guidance are illustrated in Figure 3.14. About 60% of both groups were satisfied with the amount of guidance given by teachers and almost none in either group found it a hindrance ("I would have



25. How does the child's teacher seem to feel about your assistance? *(check one)*
- a. I feel that the teacher has welcomed my assistance ....[ ]
- b. I feel that the teacher has been neutral about my assistance ....[ ]
- c. I feel that the teacher has resented my assistance ....[ ]
- d. I don't know how the teacher has felt about my assistance ....[ ]

FIGURE 3.12. VOLUNTEERS' ASSESSMENTS OF TEACHER FEELINGS ABOUT ASSISTANCE
(Nonresponse to question: 1%.)

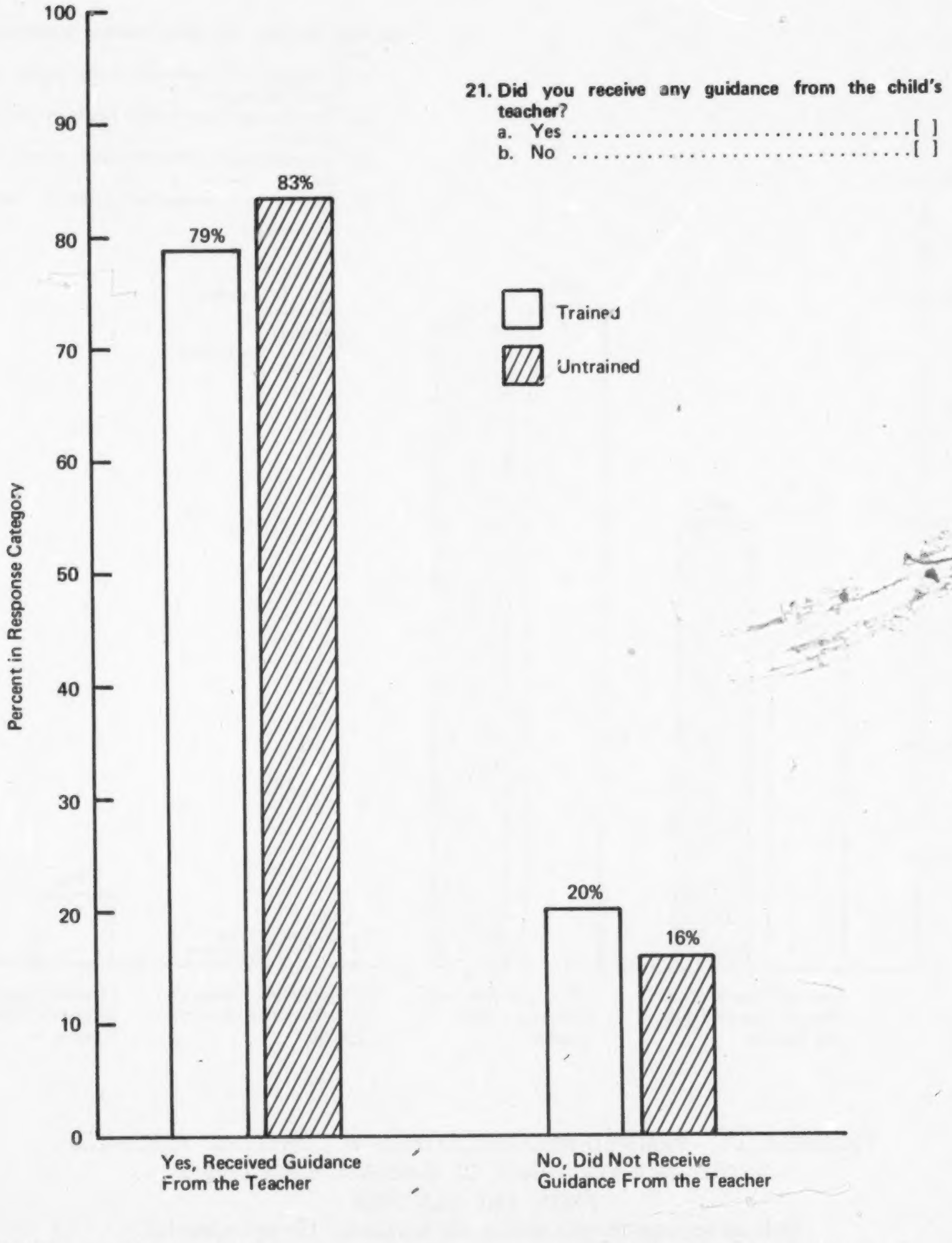


FIGURE 3.13. PROPORTIONS OF TRAINED AND UNTRAINED VOLUNTEERS WHO DID AND DID NOT RECEIVE GUIDANCE FROM THEIR PUPILS' TEACHERS (Nonresponse to question: 1% trained, 1% untrained.)

22. How do you feel about teacher guidance? *(check one)*

a. I would have preferred more teacher guidance from the teacher ....[ ]

b. The teacher I work with has given me adequate guidance ....[ ]

c. I would have preferred less guidance from the teacher ....[ ]

d. I do not need any guidance from the teacher [ ]

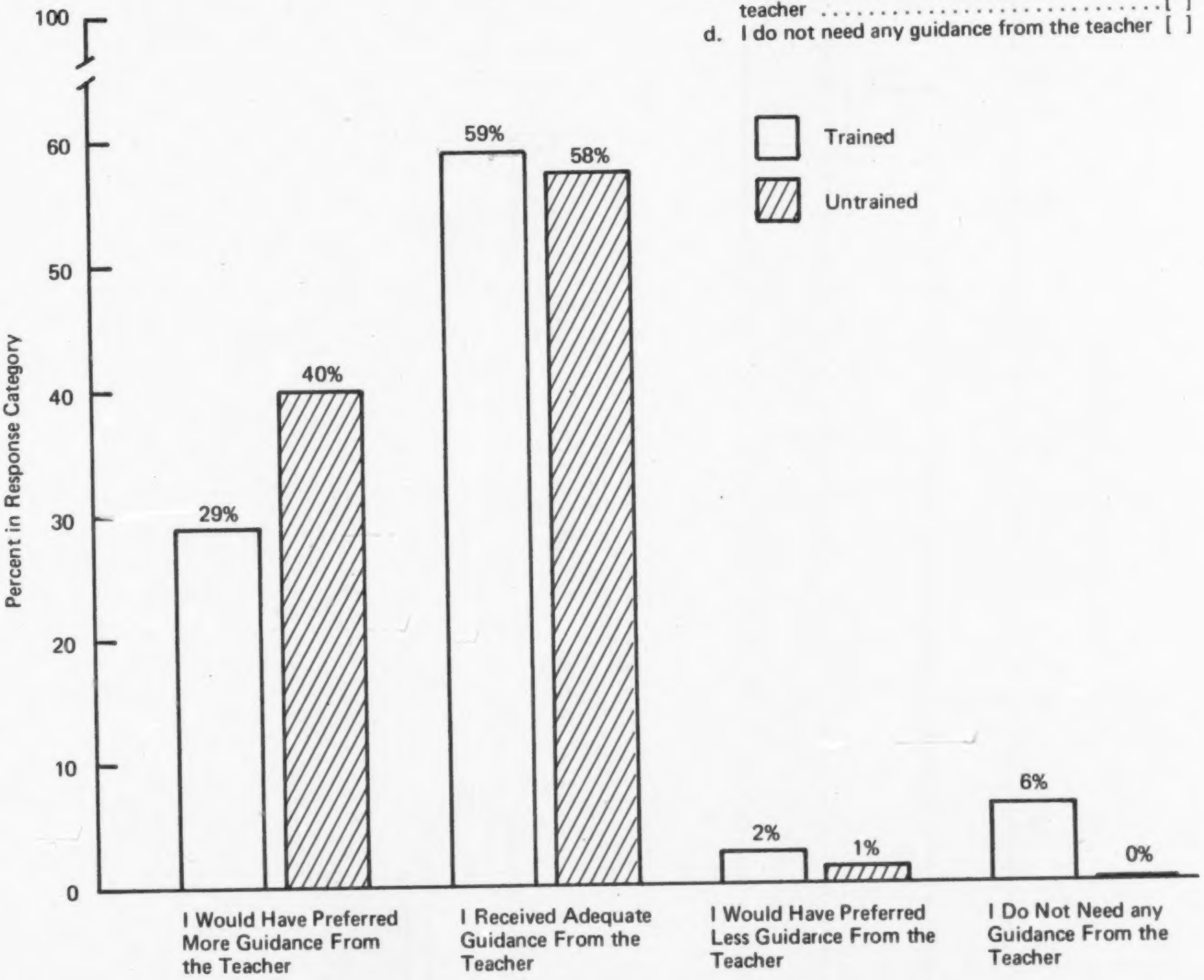


FIGURE 3.14. TRAINED AND UNTRAINED VOLUNTEERS' FEELINGS ABOUT THE ADEQUACY OF GUIDANCE RECEIVED FROM THE TEACHER
(Nonresponse to question: 4% trained, 1% untrained.)

preferred less...''). Forty percent of untrained volunteers wanted more help from teachers, versus 29% of trained volunteers. This difference was expected since the untrained group was to receive little or no support from Upswing staff while the trained group was not to rely on teachers. Apparently, from the minimal 6% of trained respondents who felt no need for teacher guidance, training did not eliminate the desire for support from the child's teacher.

Comparison of the responses to this question with responses to an identical question on the "First Impressions" form shows no significant percentage changes. We interpret this to mean that the level of interaction between volunteers and teachers remained fairly constant over the tutoring period.

Volunteer Comments About Their Relationships With Teachers

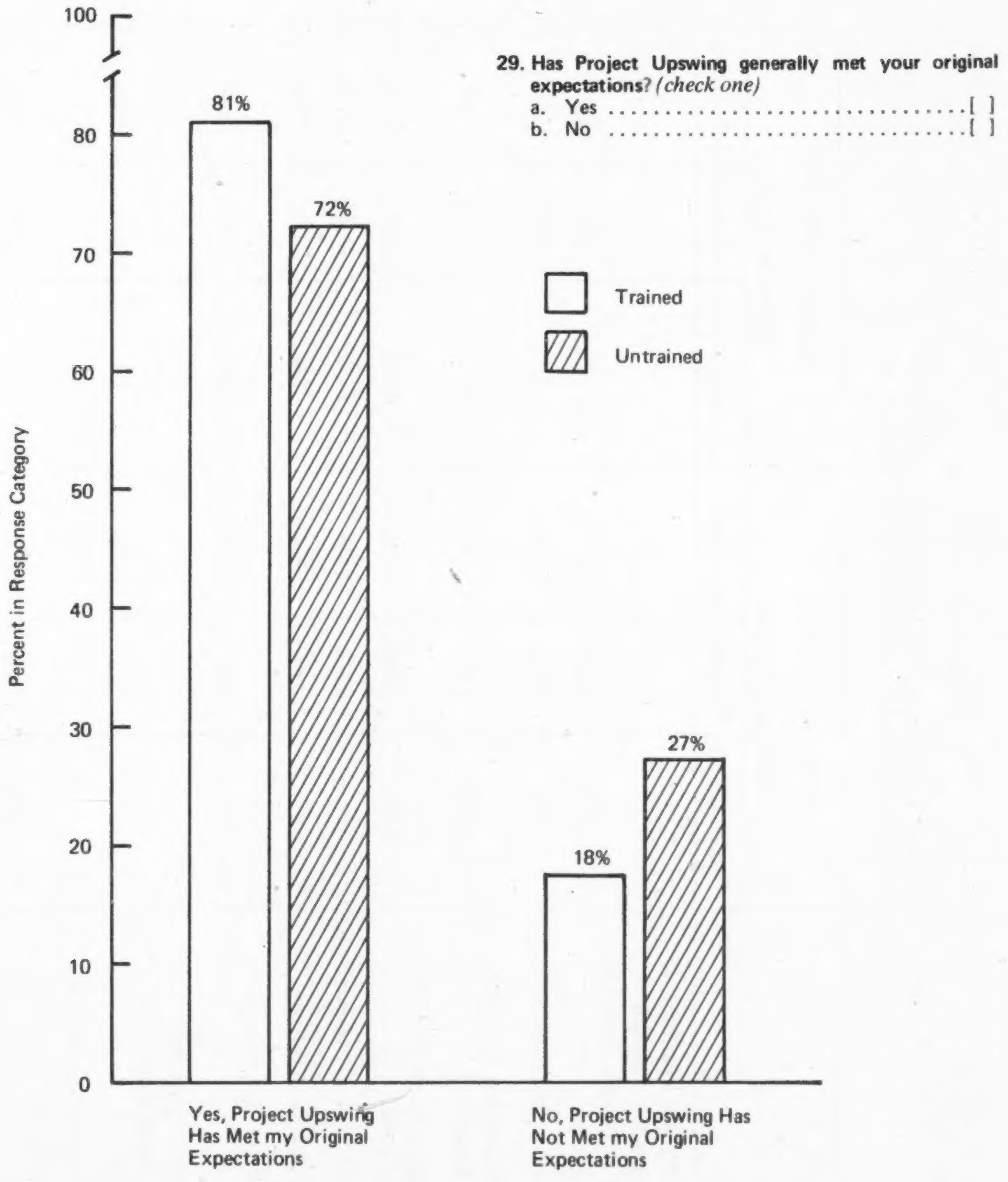
> "She has been very vocal about how pleased she is with the tutoring. Bless her heart."
>
> "She always made time to answer my questions."
>
> "Teacher didn't care what I did as long as I took the child."
>
> "Teacher always gave me progress reports and pointed out problem areas."
>
> "She has told me how much Jimmy has improved, making me more willing."
>
> "She (teacher) asked me for help."
>
> "The teacher and I had a very good relationship."
>
> "Miss (X) was very appreciative but she questioned me about why I was willing to volunteer so much time."

Volunteer Satisfaction

One indicator of satisfaction is correspondence between expectations for an experience and reality. Roughly three-quarters of all volunteers who returned the questionnaire found Upswing to be as they had anticipated. Figure 3.15 illustrates a 9% difference between the two groups in rate of fulfilled expectation (81% trained versus 72% untrained).

Since the trained volunteers were exposed to considerably more information than the untrained, one might expect a greater difference between the two sets of responses. The 9% difference found is too slight to interpret considering the weight of opinion in both cases is heavily on the side of consistency between what was anticipated and what was encountered in the project.

In a more specific question, volunteers were asked to indicate their degree of satisfaction with 10 aspects of Upswing. Working with the children, knowledge gained from the experience, Upswing's approach to working with children who have minimal learning difficulties, and working within the school system proved satisfying for roughly 80% to 95% of the volunteers, as shown in Table 3.13. The areas of any significant dissatisfaction, for both trained and untrained volunteers were: the preparation for tutoring given by Upswing, assistance received, and project communications. Untrained volunteers more often said they were dissatisfied in all three areas (see Table 3.13), as might be expected. More untrained volunteers were dissatisfied with their preparation for tutoring than were satisfied. This may well have been because they knew others received training. Lack of training did not impair their effectiveness with the children compared with the effectiveness of the trained group. It appears from the total analysis that the untrained volunteers did tend to feel left out and perhaps more insecure as tutors.



29. Has Project Upswing generally met your original expectations? *(check one)*
a. Yes ....[ ]
b. No ....[ ]

FIGURE 3.15. TRAINED AND UNTRAINED VOLUNTEERS' REPORT ON WHETHER PROJECT UPSWING MET THEIR ORIGINAL EXPECTATIONS
(Nonresponse to question: 1% trained, 1% untrained.)

TABLE 3.13

TRAINED AND UNTRAINED VOLUNTEERS' FEELINGS ABOUT VARIOUS ASPECTS OF PROJECT UPSWING

Aspect	Trained Volunteer Attitude Rating			Untrained Volunteer Attitude Rating		
	Dissatisfied	Neutral	Satisfied	Dissatisfied	Neutral	Satisfied
Upswing's overall approach to working with children who have minimal learning difficulties	3%	11%	80%	7%	10%	80%
The research questionnaires	7%	29%	60%	5%	38%	53%
The preparation for tutoring given by Upswing	25%	15%	57%	40%	27%	30%
The assistance given to you during the year	14%	29%	54%	31%	20%	48%
Overall project communications	16%	24%	56%	23%	21%	53%
Working with the children	0%	2%	96%	2%	3%	93%
Working within the school system	4%	15%	78%	2%	12%	84%
The knowledge you have gained in your Upswing experience	2%	4%	89%	0%	14%	84%
Personal recognition for your contributions of time and effort	2%	24%	69%	3%	29%	66%
Upswing as an opportunity for community service	0%	6%	91%	2%	6%	89%

said they would not (Figure 3.16). These data show that the Upswing experience was rewarding to most volunteers. Roughly 50% to 60% willingness to participate again seems high considering that mose of the volunteers were students or women with families who had many other demands on their time. It is noteworthy that here, again, one sees the impact (although not great) of training on volunteer satisfaction, at least in a situation in which some receive training. More trained volunteers said they would like to continue as Upswing tutors—63% of trained volunteers compared to 53% of the untrained volunteers.

Of those volunteers who would participate again, a little more than half said they would like to be trained; a little less than half were noncommital, stating that it depends on the training; between 4% and 5% thought training unnecessary. Figure 3.17 compares responses of the two types of volunteer. The differences the diagram describes are slight, but it appears that trained respondents tended to feel that since they had been through Upswing training once, they would have to know something about content before signing up for it again. However, a significant percentage of the untrained respondents expressed similar reservations. Thus to some degree, this type response probably traces back to the value placed on experience by both groups.

30. **Do you think you would like to continue as an Upswing volunteer next year?** *(check one)*
a. Yes ....[ ]
b. No ....[ ]

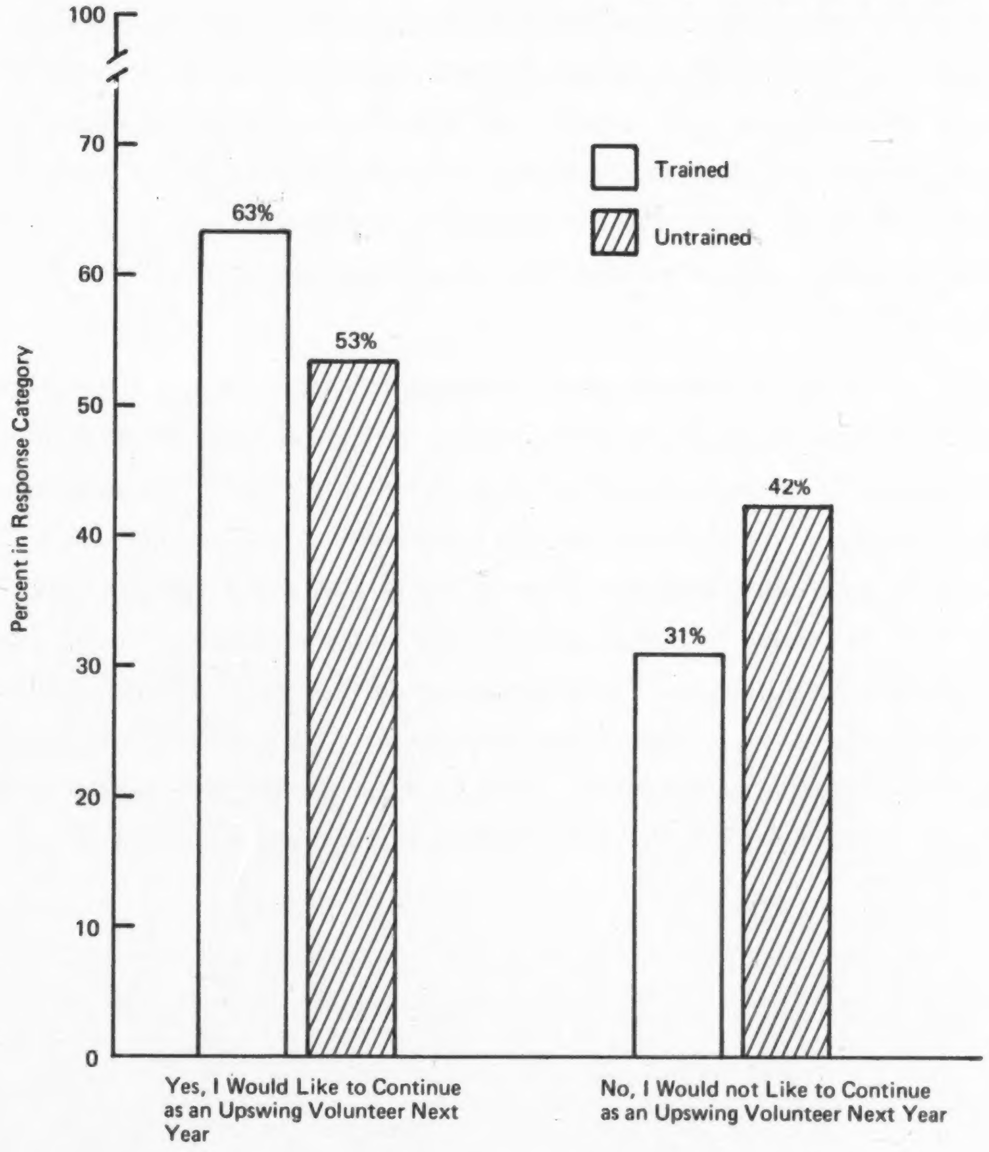


FIGURE 3.16. TRAINED AND UNTRAINED VOLUNTEERS' WILLINGNESS TO CONTINUE AS UPSWING TUTORS
(Nonresponse to question: 5% trained, 5% untrained.)

31. If you would like to continue as an Upswing volunteer, which statement applies to you:
a. I would not want to receive training ......[ ]
b. I would want to receive training ....[ ]
c. I don't know/it depends on the training ....[ ]

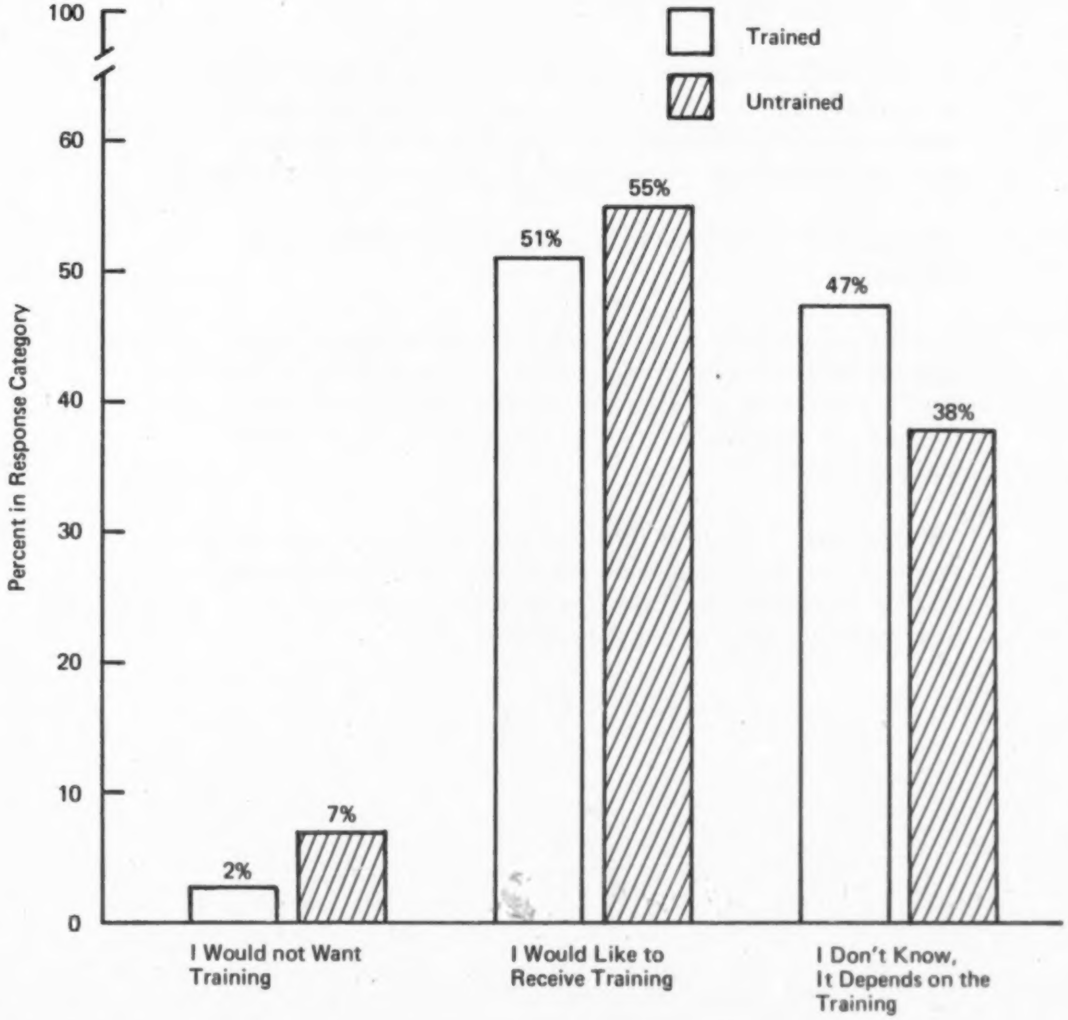


FIGURE 3.17. FEELING ABOUT RECEIVING TRAINING EXPRESSED BY VOLUNTEERS WHO WOULD BE WILLING TO WORK AS UPSWING TUTORS AGAIN

Volunteer Comments Related to Satisfaction With Upswing

"I think I failed Project Upswing for several reasons - my child had more problems than learning ones and I did not cope well enough."

"I have experienced a great deal which is hard to put in words. The reward from my child when he read a whole story by himself, was enough that made me wanting and eager to be on time and at every session."

"Being able to help even one child who needs it is rewarding."

"I would just like to say that I really enjoyed being able to work with a child. As a future teacher I feel that I gained very valuable experience in teaching. It gave me a chance to know whether or not I really want to teach."

"In general, I believe Project Upswing is a very good program. It helps children directly, aids the teachers, and is rewarding to the tutor himself. I hope the program will remain for a long time."

TEACHERS' FINAL IMPRESSIONS OF PROJECT UPSWING

Parameters of the Population

There were originally 130 teachers involved in Project Upswing. By the end of the year 116 remained. Losses of teachers generally occurred not because they left the project but because they no longer had any pupils being tutored (either children changed schools or, primarily, volunteers attrited). The final teacher questionnaire response rate for each city, computed against the total number of teachers involved in the project at the end of the year, are given in Table 3.14. The rates given in Table 3.14 show that the teacher responses can be considered representative of the total teacher population and of the individual teacher population in each city.

Special Considerations About the Data

Most teachers had more than one pupil involved in Upswing. Thus in the figures and tables describing observations of specific children, the totals are of children reported on by teachers, not numbers of responding teachers, and the percentages are based on numbers of children. In these cases N = 251 for the project as a whole. Note that only 247 children received tutoring through March 31, 1972 (ORI's cutoff date for considering a child in the analysis of tutoring results). Four teachers reported on children whose volunteers left the project earlier, and these responses were not removed since they could not alter the patterns of opinions to any meaningful extent.

Summary of Teachers' Final Impressions

- The volunteers on whom teachers reported, primarily those who tutored at least through March 31, 1972, were faithful about keeping tutoring appointments. Apparently, most of the volunteers who tended to miss sessions dropped out earlier in the year.

TABLE 3.14

RATE OF RESPONSE TO FINAL TEACHER QUESTIONNAIRE, BY CITY

City	Teacher Population at End of Tutoring	Final Questionnaire Respondents*
Denver	46	46 100%
Oxford	18	17 94%
St. Louis	21	20 95%
San Francisco	25	22 88%
Total	116	105 91%

* Percentages given are percentages of the numbers of teachers in column 2.

- Teachers often were uncertain about how much guidance to give volunteers. The types of guidance they said they would be most willing to give suggest that they prefer an advisory role rather than planning for volunteers and telling them what to do. However, most teachers felt they should be consulted.
- Teachers found the majority of both trained and untrained volunteers well prepared for their work as tutors. However, the teachers generally thought the training given half of the Upswing volunteers worthwhile. Twenty-two percent more throught the trained volunteers were well prepared than had that opinion of the untrained.
- From what teachers observed, the children and their volunteers had very good relationships. Cases of hostility or confusion on the part of a child were extremely rare. A small percentage showed their teachers no feeling, either positive or negative.
- Teachers found almost 100% of the Upswing volunteers with whom they had contact cooperative. About 20%, however, indicated they did not work with the volunteers enough to judge.
- About three-quarters of the teachers indicated satisfaction with Upswing by their willingness to work with Upswing volunteers again. Many, however, felt they did not fully understand the project and the teachers role in it.
- A very large majority of teachers said that should they participate in Upswing again, they would prefer to work with trained volunteers.

Project Organization and Operations

Volunteer Attendance. Table 3.15 describes the regularity with which volunteers met with the children. It shows that of the total volunteer population reported on, 73% attended most of the sessions. Some variability is evident among the cities. The data indicate that San Francisco volunteers and, to a lesser extent, those from Denver, tended to miss tutoring sessions more often than volunteers in St. Louis and Oxford. The percentage who missed half or more of the sessions is higher in all cities than one might hope (range: 21% in Oxford to 39% in San Francisco).

The data in Table 3.15 may be misleading because there was a tendency for teachers not to report on children whose volunteers dropped out early in the tutoring period. The percentages of volunteers who missed half or more of the tutoring sessions include some, but not all dropouts.

Table 3.16 shows that, considering all cities combined, relatively few children had replacement tutors. Eighteen children (7% of the total number reported on) had their volunteers replaced once and two children (1% of total) had their volunteers replaced three or more times. Thus discontinuity of volunteer-child relationships was not a significant problem.

The table does not reflect how many volunteers dropped out and were not replaced. However, referring back to the introduction to this subsection (page 3-62), we know that 46% (N = 247) of the original group of 407 children who were assigned tutors were no longer receiving tutoring by the end of March 1972, in most cases because volunteers dropped out. It is important to remember that high replacement rates reflect not only turnover, but also a successful effort on the part of Upswing to continue the children's tutoring experience. Trained volunteers of course could not be replaced.

TABLE 3.15

NUMBER OF TIMES VOLUNTEERS MET WITH CHILDREN, BY CITY

Attendance Estimate	Denver	Oxford	St. Louis	San Francisco	Total
Most of the sessions	52 68%	58 78%	54 78%	19 61%	183 73%
Half of the sessions	15 19%	10 14%	9 13%	9 29%	43 17%
Less than half of the sessions	10 13%	5 7%	6 9%	3 10%	24 10%
No response to question	0 0%	1 1%	0 0%	0 0%	1 <0.5%
Total	77 100%	74 100%	31 100%	31 100%	251 100%

TABLE 3.16

REPLACEMENT OF VOLUNTEERS, BY CITY

Times Volunteer Was Replaced	Denver	Oxford	St. Louis	San Francisco	Total
Never	71 93%	53 72%	69 100%	30 97%	223 89%
Once	4 5%	13 18%	0 0%	1 3%	18 7%
Twice	0 0%	0 0%	0 0%	0 0%	0 0%
Three or more	1 1%	1 1%	0 0%	0 0%	2 1%
No response to question	1 1%	7 9%	0 0%	0 0%	8 3%
Total	77 100%	74 100%	69 100%	31 100%	251 100%

Volunteer Guidance. Responses to a question about how much guidance teachers should give Upswing volunteer tutors show strong differences of opinion and a sizable element of confusion. There was an even, four-way split of opinion. (Figure 3.18). About a quarter of the population said they did not know what guidance to give, about the same percentage as expressed any opinion. Thus it is difficult to draw any conclusion about what degree of involvement the 1971-72 participating teachers wanted.

Table 3.17 gives the individual cities responses. In Denver, 35% of teachers felt they should have a hand in the activities of all volunteers, versus 15% who said all volunteers should function independently. Thus opinion there, although by no means a consensus (especially considering 20% either did not know or skipped the question), was more unanimous than in any other city. St. Louis shows almost half in the "Don't Know" category; 45% of the teachers there expressed uncertainty about how they should relate to the Upswing volunteers.

In interpreting the implications of these data for the second year of Upswing, one might consider the teachers who believed they should direct only untrained tutors with those who felt all tutors should work independently, since there are no untrained volunteers involved in the second year. This procedure tips the balance of opinion toward the view that the Upswing volunteer tutors should be independent. However, a sizable group remains who felt that teachers should direct tutoring activities. Role clarification is essential so that teachers and volunteers can know how to work together, but the data suggest that the degree of teacher involvement will reflect personal preference.

Kinds of Guidance Teachers Were Most Willing to Give Their Volunteers. Table 3.18 perhaps holds the key to interpreting what priorities teachers had in giving direction to their trained and untrained volunteers. The table is based on responses to a question in which teachers were asked to rank six kinds of aid according to how willing they were to give each kind to Upswing volunteers.

17. How do you feel about giving direction to Upswing volunteers?
(Check one)

a. The teacher should direct most of the tutoring activities of Upswing volunteers who do not receive Upswing training .... [ ]
b. The teacher should direct most of the tutoring activities of any Upswing volunteer, regardless of training .... [ ]
c. The Upswing volunteer, regardless of training, should function independently of the teacher .... [ ]
d. I do not know how much to give .... [ ]

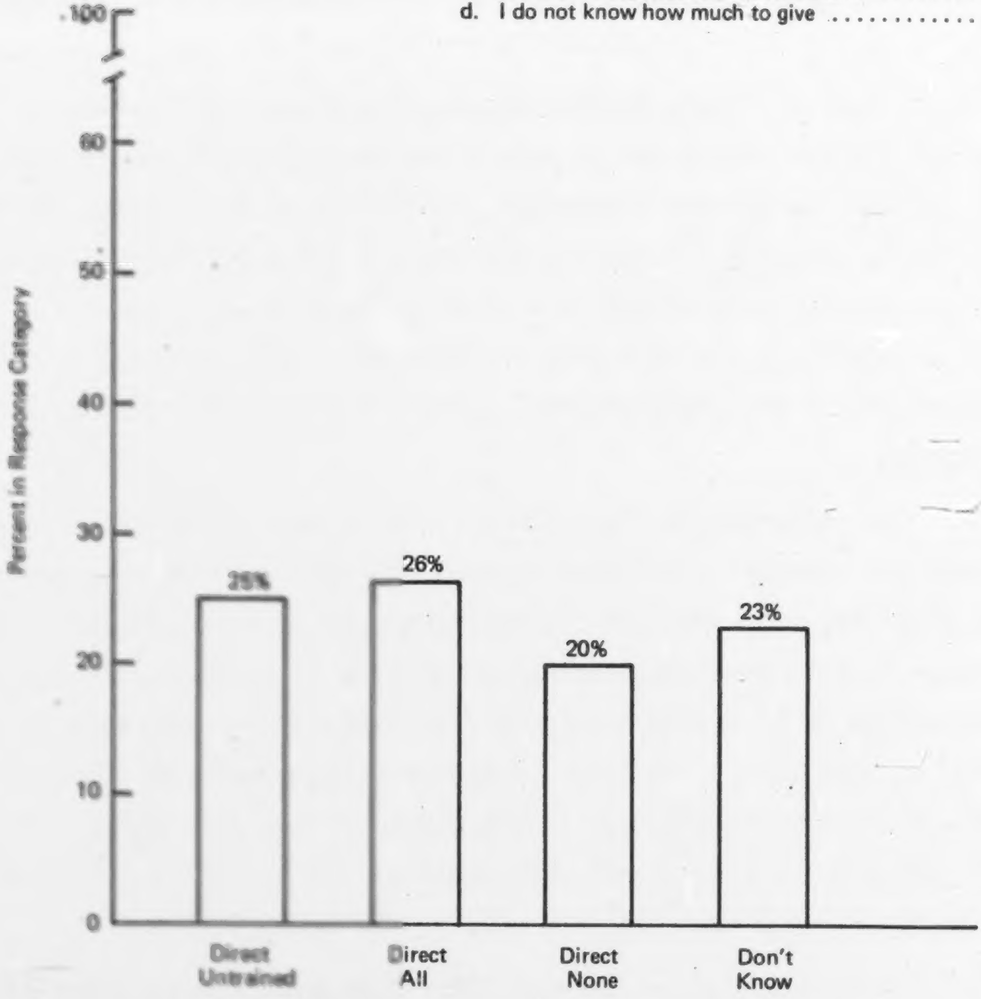


FIGURE 3.18. TEACHERS' PREFERENCES ABOUT GIVING DIRECTION TO UPSWING VOLUNTEERS, ALL CITIES
(Nonresponse to question: 6%.)

TABLE 3.17

TEACHER PREFERENCES ABOUT GIVING DIRECTION TO UPSWING VOLUNTEERS, BY CITY

Appropriate Level of Guidance	Denver	Oxford	St. Louis	San Francisco	Total
Direct most activities of untrained volunteers	14 30%	5 29%	3 15%	4 18%	26 25%
Direct most activities of all volunteers	16 35%	3 18%	4 20%	4 18%	27 26%
Let volunteers function independently	7 15%	5 29%	3 15%	6 27%	21 20%
Do not know	5 11%	4 24%	9 45%	6 27%	24 23%
No response to question	4 9%	0 0%	1 5%	2 10%	7 6%
Total	46 100%	17 100%	20 100%	22 100%	105 100%

TABLE 3.18

KINDS OF GUIDANCE TEACHERS WERE MOST WILLING TO GIVE VOLUNTEERS, IN ORDER OF RANK, ALL CITIES

Rank From 1 - 6	Question-naire Listing	Kinds of Guidance	Given to Trained	Given to Untrained
1	a.	Discussed child's progress and problem areas	54 77%	55 81%
2	b.	Coordinated classroom and tutoring activities	39 56%	37 54%
3	c.	Suggested tutoring materials	33 47%	35 52%
4	d.	Helped volunteer locate tutoring materials	30 43%	33 48%
5	e.	Regularly gave guidance in planning tutoring activities	32 46%	33 48%
6	f.	Regularly assigned tutoring activities	42 60%	40 59%

The teachers ranked separately for trained and untrained volunteers. The table shows only majority opinion. For example, 77% of the teachers who answered the question said they were most willing to "discuss child's progress and problem areas" with his volunteer tutor; they ranked that choice number 1. The remaining 23%, not shown in the table, gave that choice another rank, from 2 to 6; it was not the kind of aid they were most willing to give. The data on which Table 3.18 is based show, however, that nearly every responding teacher considered the first three choices listed the top three, regardless of which was placed first, second, or third.

Comparing Table 3.18 to Table 3.19, one sees that the teachers prefer to give the kinds of assistance they in fact most often gave. Beyond that, which might be expected, the most striking thing about Table 3.18 is that it suggests training volunteers apparently does not influence teacher opinion about what kinds of assistance are appropriate. They seem to prefer not to directly govern the activities of tutors, regardless of training. The top three choices are in the line of counseling, whereas the last three represent stronger direction and would be more time-consuming. Going to Table 3.19, teachers more often gave the last three types of help to untrained volunteers, which may have something to do with most teachers preferring to work with trained (that preference shown in Figure 3.23, presented later in this section).

The ranking directly coincides with the order of response categories as listed on the questionnaire. In order words, item "a" on the questionnaire was ranked as their "most willing" choice, item "b" as their second, and "c" their third, etc. This brings up the possibility of response bias. That the majority of the teachers felt most willing to do "a" with the volunteers and least willing to do "f" could mean that the format of the questionnaire tended to influence decisions. However, other data (Table 3.19 and Figure 3.23, as discussed above, and questionnaire and interview comments about limited time to spend with the volunteers) suggest the ranking is true.

TABLE 3.19

PERCENTAGE OF TEACHERS PROVIDING EACH KIND OF GUIDANCE OR ASSISTANCE TO TRAINED AND UNTRAINED VOLUNTEERS, ALL CITIES*

Kind of Guidance or Assistance	Trained Volunteers	Untrained Volunteers
Discussed child's progress and problem areas	77 73%	71 68%
Had discussion to coordinate classroom and tutoring activities	54 51%	50 48%
Suggested tutoring material	61 58%	60 57%
Helped volunteer locate tutoring materials	37 35%	43 41%
Regularly gave guidance in planning tutoring sessions	13 12%	22 21%
Regularly assigned tutoring activities	8 8%	14 13%

* Percentages based on total number of teachers who worked with each type of volunteer.

Teacher Comments About Project Organization and Operations

—Volunteer Attendance—

"In view of spotty tutor attendance, I'm reluctant to ascribe child's improvement to this program."

"Children gained when volunteer was regular in attendance."

"The volunteer has been 'extremely' faithful about her attendance. She has always been quite punctual, also."

"The people did not come regularly enough on the whole for the program to be effective."

—Appropriate Teacher Guidance of Volunteers—

"There should be some contact between teacher and volunteer so the tutoring will be pertinent to what is going on in the classroom."

"Any training will help the tutor and lessen the guidance I will have to give him."

"The volunteer and teacher should jointly decide and agree on the child's activities."

"The teacher knows what needs to be accomplished and, due to experience, the most effective ways of accomplishing them."

"I feel having a person use techniques different from my classroom, teaching on a one-to-one basis, is more beneficial."

Volunteer Training

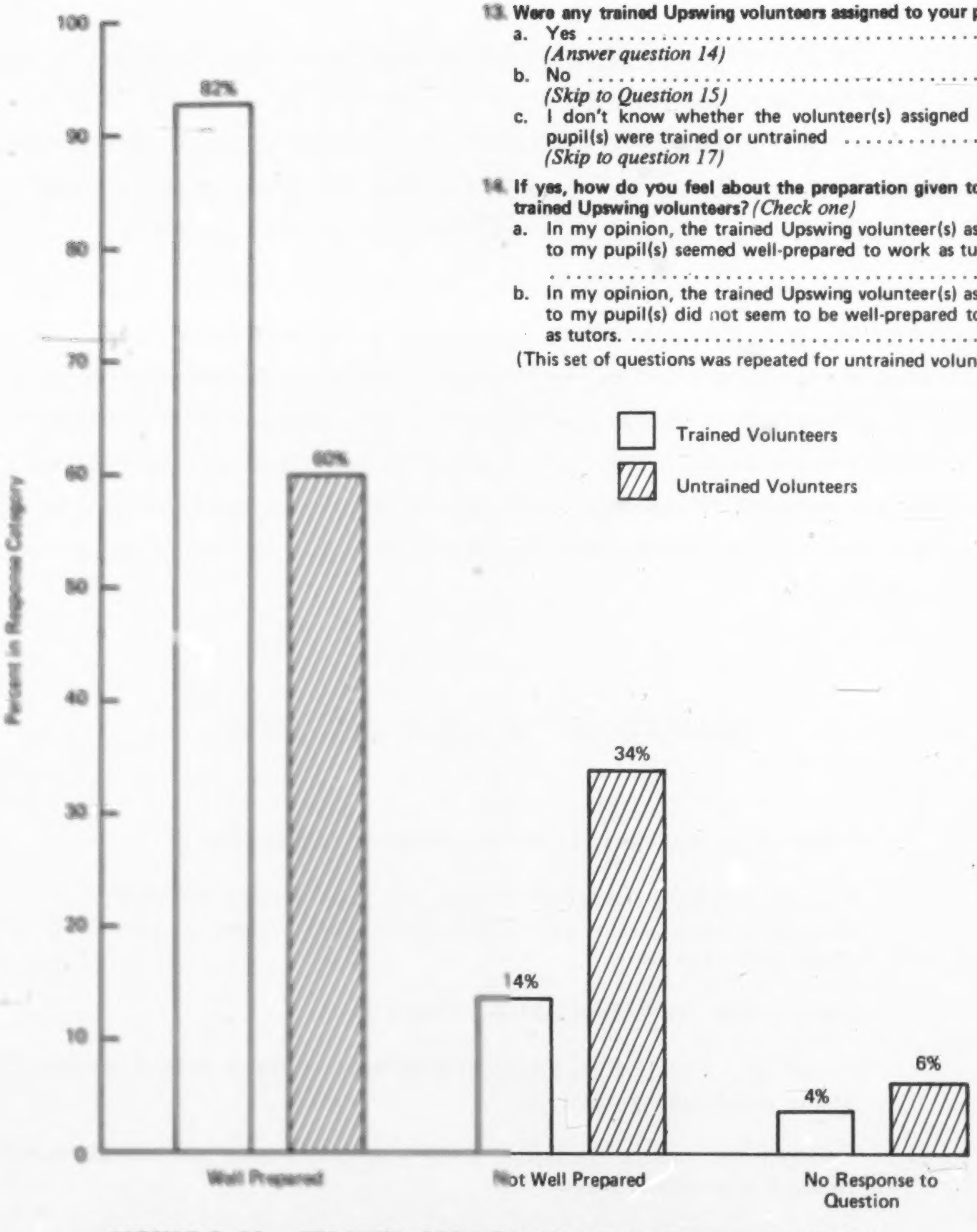
Teachers seemed to value the Upswing training program. Figure 3.19 shows that 82% described the trained volunteers as well prepared to work as tutors, versus 60% who described the untrained volunteers as well prepared. These percentages are based on the number of teachers who knew whether the volunteers assigned to their pupils were trained or untrained. About half of those in St. Louis and San Francisco did not know training status; about 20% and 30% in Denver and Oxford, respectively, did not know.[3]

Based on questionnaire and interview comments, teachers generally had little information about the content of volunteer training. (Their dissatisfaction with this situation has resulted in information about volunteer training being made a required part of teacher training for the second year of the project.) Nor did they have an opportunity to observe tutoring sessions. Thus their judgments about volunteer preparation had to be based on effects of tutoring observed in the children and on the amount of teacher assistance sought by trained versus untrained volunteers. In addition, teachers, as a professional group, regard their work as demanding strong skills and thus they would likely tend to favor the idea of training. ORI believes that the latter two factors probably had more to do with the difference of opinion reflected in Figure 3.19.

Statistical tests showed no significant difference in trained and untrained volunteers' impact on children's performance. However, based on teacher opinion project-wide, it appears that training volunteer tutors to work fairly independently may be important to teacher satisfaction with the project. It should be kept in mind that 60% said they considered the untrained volunteers well prepared. This is a large proportion, although significantly smaller than the proportion who found the trained well prepared.

---

[3] The project specification was unclear as to whether teachers should know the training status of the volunteers. The high incidence of teachers who did not know resulted from project directors' attempts to adhere to the project design.



13. Were any trained Upswing volunteers assigned to your pupils?
a. Yes ....[ ]
(Answer question 14)
b. No ....[ ]
(Skip to Question 15)
c. I don't know whether the volunteer(s) assigned to my pupil(s) were trained or untrained ....[ ]
(Skip to question 17)

14. If yes, how do you feel about the preparation given to these trained Upswing volunteers? *(Check one)*
a. In my opinion, the trained Upswing volunteer(s) assigned to my pupil(s) seemed well-prepared to work as tutors ....[ ]
b. In my opinion, the trained Upswing volunteer(s) assigned to my pupil(s) did not seem to be well-prepared to work as tutors. ....[ ]

(This set of questions was repeated for untrained volunteers.)

FIGURE 3.19. TEACHER OPINION ABOUT WHETHER TRAINED, UNTRAINED VOLUNTEERS RECEIVED ADEQUATE PREPARATION FOR TUTORING, ALL CITIES
(Percentages based on numbers of teachers who knew that volunteers were trained or untrained.)

Table 3.20 shows some interesting differences between cities. St. Louis teachers indicated they found training made no difference. The percentages who found trained and untrained volunteers well- and ill-prepared are essentially equal. In the other cities 25% to 30% more teachers thought the trained were well prepared than held that opinion of the untrained.

The rates of nonresponse also vary. Apparently Oxford and St. Louis teachers felt more confident to make a judgment. ORI interprets the high percentage of nonresponse in San Francisco as a reflection that those teachers felt they did not have enough information to make a judgment about adequacy of volunteer preparation. However, it would be inappropriate to consider this difference particularly important since the numbers of teachers involved are so small. For example, two teachers are 17% of the San Francisco population for this tabulation.

Teacher Comments About Volunteer Training

"What little I did see the tutors looked well prepared."

"I don't feel that the training given the volunteers made much difference in their ability to tutor in my class situation—untrained tutors did as well."

"They could use more training, always."

"I feel that I can better train the volunteer because of my knowledge of the needs of my pupils."

"Trained volunteers are better able to assess needs and use materials in more innovative ways."

"The trained volunteers seemed to have more interest in the child."

TABLE 3.20

TEACHER OPINION ABOUT WHETHER TRAINED, UNTRAINED VOLUNTEERS RECEIVED ADEQUATE PREPARATION FOR TUTORING, BY CITY

Teacher Opinion	Denver		Oxford		St. Louis		San Francisco		Total	
	T	U	T	U	T	U	T	U	T	U
Volunteers seemed well prepared for tutoring	30 83%	21 57%	11 92%	9 69%	7 70%	6 67%	9 75%	5 56%	57 82%	41 60%
Volunteers did not seem well prepared for tutoring	5 14%	13 35%	1 8%	4 31%	3 30%	3 33%	1 8%	3 33%	10 14%	23 34%
No response to question	1 13%	3 8%	0 0%	0 0%	0 0%	0 0%	2 17%	1 11%	3 4%	4 6%
Total	36 100%	37 100%	12 100%	13 100%	10 100%	9 100%	12 100%	9 100%	70 100%	68 100%

* Percentages based on numbers of teachers who stated that trained and untrained volunteers were assigned to their pupils. Teachers who did not know the training status of volunteers were removed from the Ns.

Relationships of Project Participants

Volunteer-Pupil Relationship. In Figure 3.20 it is evident that teachers believed their pupils responded favorably to the Upswing volunteers. Only a negligible percentage of children showed a confused or hostile attitude toward their tutors according to teachers. Close to three-quarters of the children reported on by all teachers demonstrated a willingly cooperative attitude. Table 3.21 suggests that there were no important differences of opinion among teachers on this point from city to city.

Volunteer-Teacher Relationship. Teachers' views of volunteers' attitudes toward working with them deserves being recorded to the extent that teacher-volunteer interaction rubs off on the children. It was hypothesized that obvious cooperation, or lack of it, between these two important people in the school life of an Upswing child would affect the child's approach to learning. The data indicate that volunteers generally showed positive attitudes toward teachers. Figure 3.21 shows, for all cities, 78% of the volunteers described as cooperative and 2% as uncooperative, with a 17% "little or no contact" between volunteer and teacher.

Table 3.22 shows that the "little or no contact" response category was swelled by St. Louis and San Francisco responses. These two cities adhered most strictly to the original project design stipulation that trained volunteers should function without teacher guidance. In Oxford, an effort was made to foster cooperation between teachers and volunteers, regardless of the latter's training status, after it was learned that teachers felt uncomfortable without some contact and "say" in what the volunteers were doing. Further, Oxford is a small town. Many of the volunteers and teachers knew each other outside of school. In Denver, volunteers assigned to each school where the project was operating provided liaison among teachers, volunteers, and the Upswing office. They may have promoted more communication than the staff people with other professional obligations who performed that function in St. Louis and San Francisco.

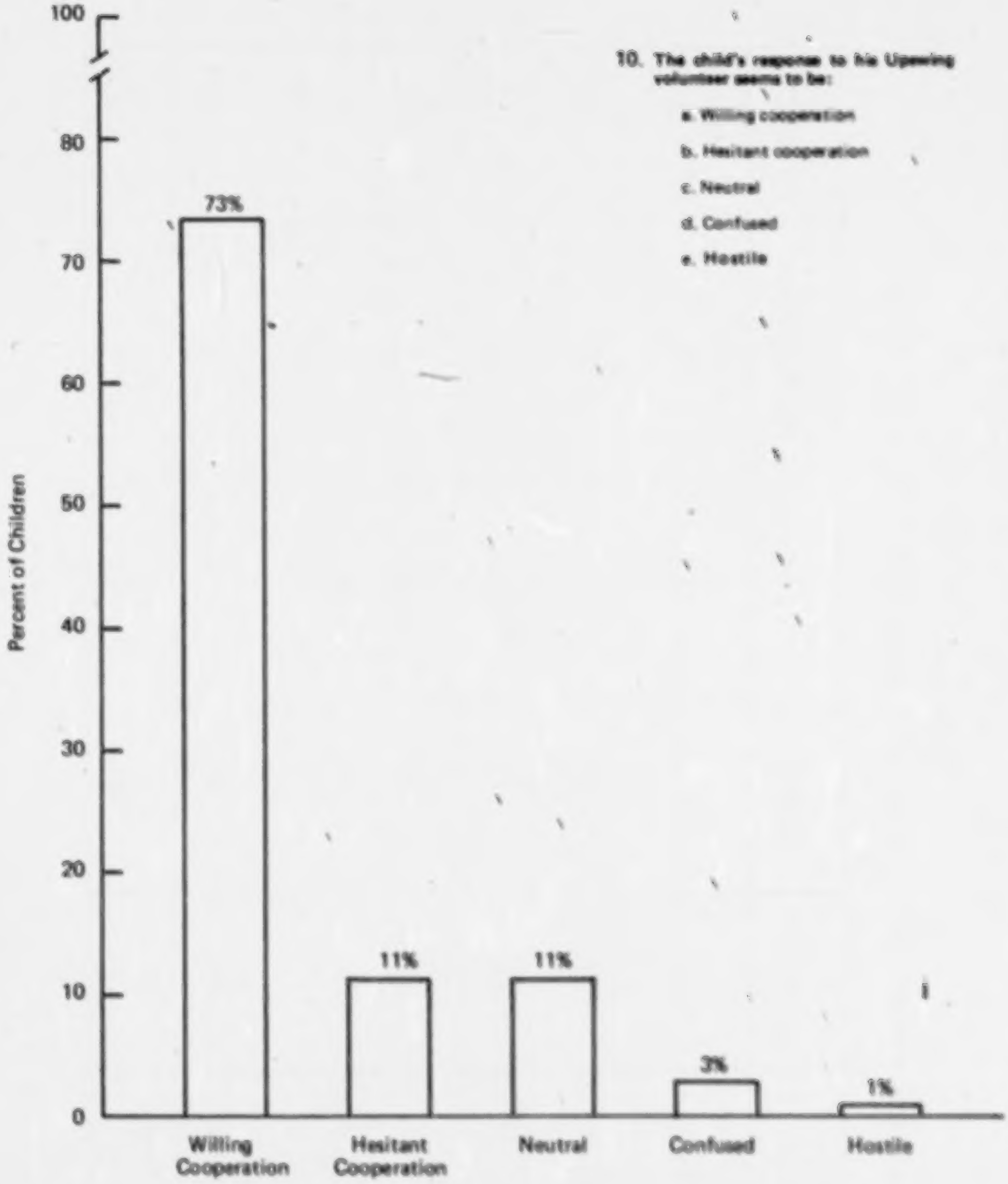
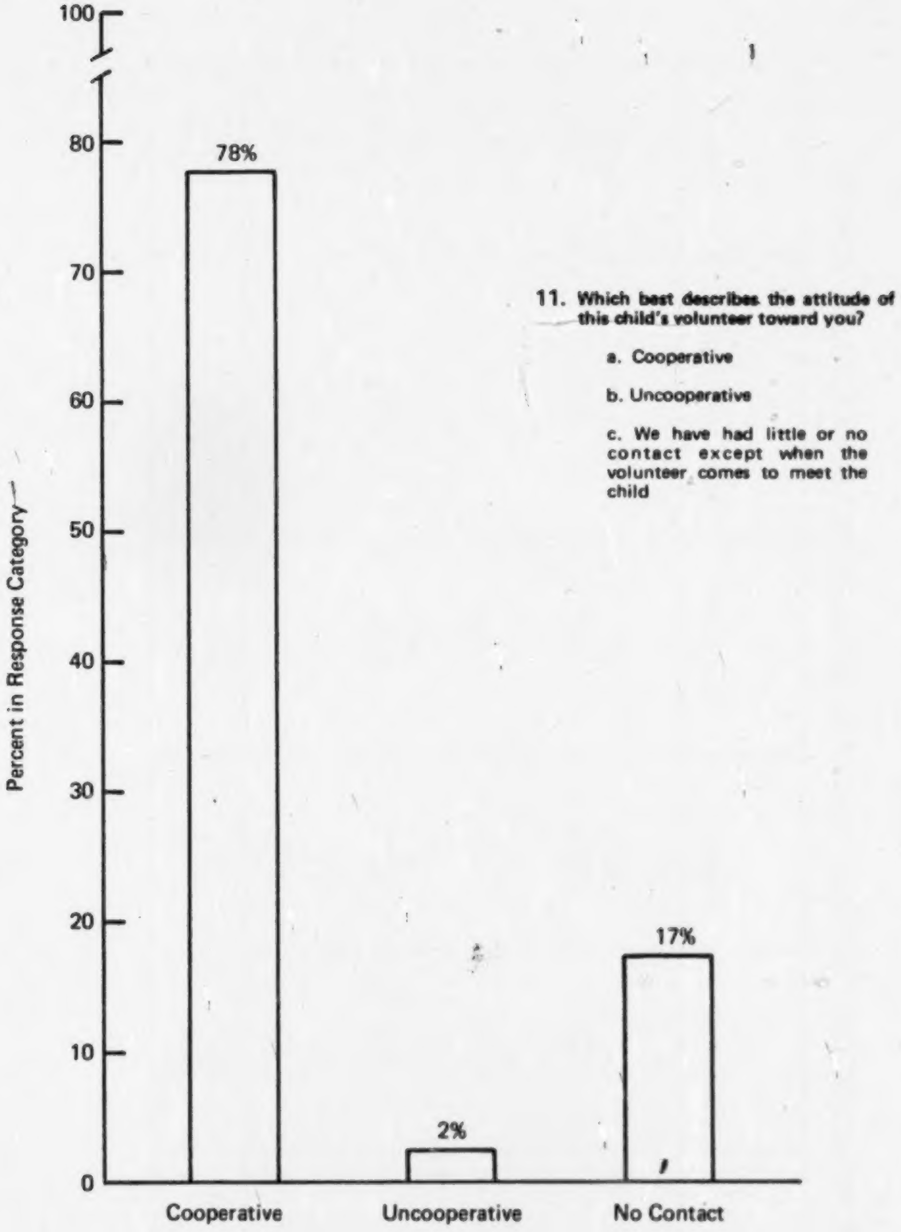


FIGURE 3.20. TEACHER ASSESSMENT OF CHILDREN'S RESPONSE TO TUTORS, ALL CITIES
(Nonresponse to question: 1%)

TABLE 3.21

TEACHER ASSESSMENT OF CHILDREN'S RESPONSE TO TUTORS, BY CITY

Assessment of Response	Denver	Oxford	St. Louis	San Francisco	Total
Willing cooperation	61 79%	60 81%	44 64%	19 61%	184 73%
Hesitant cooperation	5 7%	6 8%	10 15%	6 20%	27 11%
Neutral	3 4%	8 11%	11 16%	5 16%	27 11%
Confused	3 4%	0 0%	3 4%	1 3%	7 3%
Hostile	1 1%	0 0%	1 1%	0 0%	2 1%
No response to question	4 5%	0 0%	0 0%	0 0%	4 1%
Total	77 100%	74 100%	69 100%	31 100%	251 100%



11. Which best describes the attitude of this child's volunteer toward you?

a. Cooperative

b. Uncooperative

c. We have had little or no contact except when the volunteer comes to meet the child

FIGURE 3.21. ATTITUDES OF VOLUNTEERS TOWARDS TEACHERS, AS ASSESSED BY TEACHERS, ALL CITIES
(Nonresponse to question: 3%.)

TABLE 3.22

VOLUNTEER ATTITUDES TOWARDS TEACHERS, AS ASSESSED BY TEACHERS, BY CITY

Volunteers' Attitude to Teachers	Denver	Oxford	St. Louis	San Francisco	Total
Cooperative	61 79%	65 88%	50 72%	19 61%	195 78%
Uncooperative	2 3%	0 0%	4 6%	0 0%	6 2%
Little or no contact	7 9%	9 12%	15 22%	11 36%	42 17%
No response to question	7 9%	0 0%	0 0%	1 3%	8 3%
Total	77 100%	74 100%	69 100%	31 100%	251 100%

Teacher Comments About Their Relationships With Volunteers

(Teachers did not comment on volunteer-pupil relationships.)

"Program created many problems I would not have encountered. There isn't time to help volunteers or individual programs and I would prefer stressing my own."

"I found these volunteers to be very enthusiastic, full of ideas, and a great help to the children."

"We worked together. I learned some good things from the volunteer."

"My volunteers were exceptionally good."

"They (the volunteers) were very conscientious and used materials capably, also were willing to ask for advice and use ideas I might have for a particular child."

Teacher Satisfaction

Figure 3.22 points to a disturbing communications problem in Phase I of Project Upswing. About 40% of all teachers involved said they did not clearly understand Upswing and the part teachers were to play in it. Table 3.23 shows that this confusion occurred in all cities, with the greatest proportion of teachers in St. Louis indicating they felt "at sea" and the lowest proportion in San Francisco.

Phase I teacher preparation was brief and took one of two forms. In Denver and San Francisco a meeting was held to explain the project to teachers who referred children as candidates for tutoring. Seventy-six percent of the Denver teachers who returned final questionnaires said they attended this meeting and 82% of those in San Francisco said they attended. Upswing staff visited the schools in Oxford and St. Louis to explain the project to teachers.

The data suggest that considerable attention must be given to bringing teachers into a project like Upswing and making sure they know what responsibilities they will have. Early feedback resulted in the university project directors in each city establishing a 10-hour minimum for teacher orientation/training in the second year of Upswing. Questionnaire comments from both teachers and volunteers have been used in planning the content of teacher preparation for the project in the second year.

Problems with teachers' understanding of the project and their role in it, along with cases of sporadic attendance by volunteers, probably account for most of the 22% of teachers (Figure 3.23) who said they would prefer not to work with Upswing volunteers again. This was the trend suggested by teachers who commented on their feeling in responding to the questionnaire.

Figure 3.23 shows that 73% of the teachers would want to work with Upswing volunteers again, with 67% preferring trained volunteers and 6% preferring untrained. Thus, when offered a choice, teachers decidedly favored trained over untrained volunteers. This is consistent with teacher opinion about how

23. Do you have a clear understanding of Project Upswing and what your role in it is supposed to be?
a. Yes ....[ ]
b. No ....[ ]

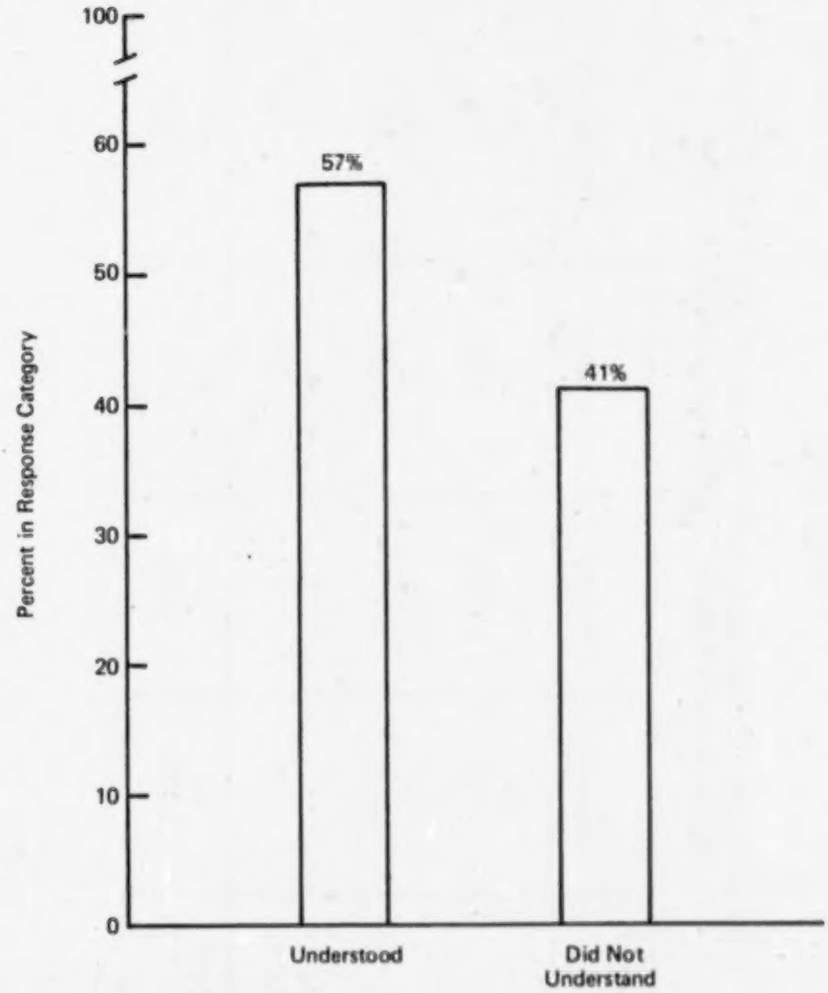
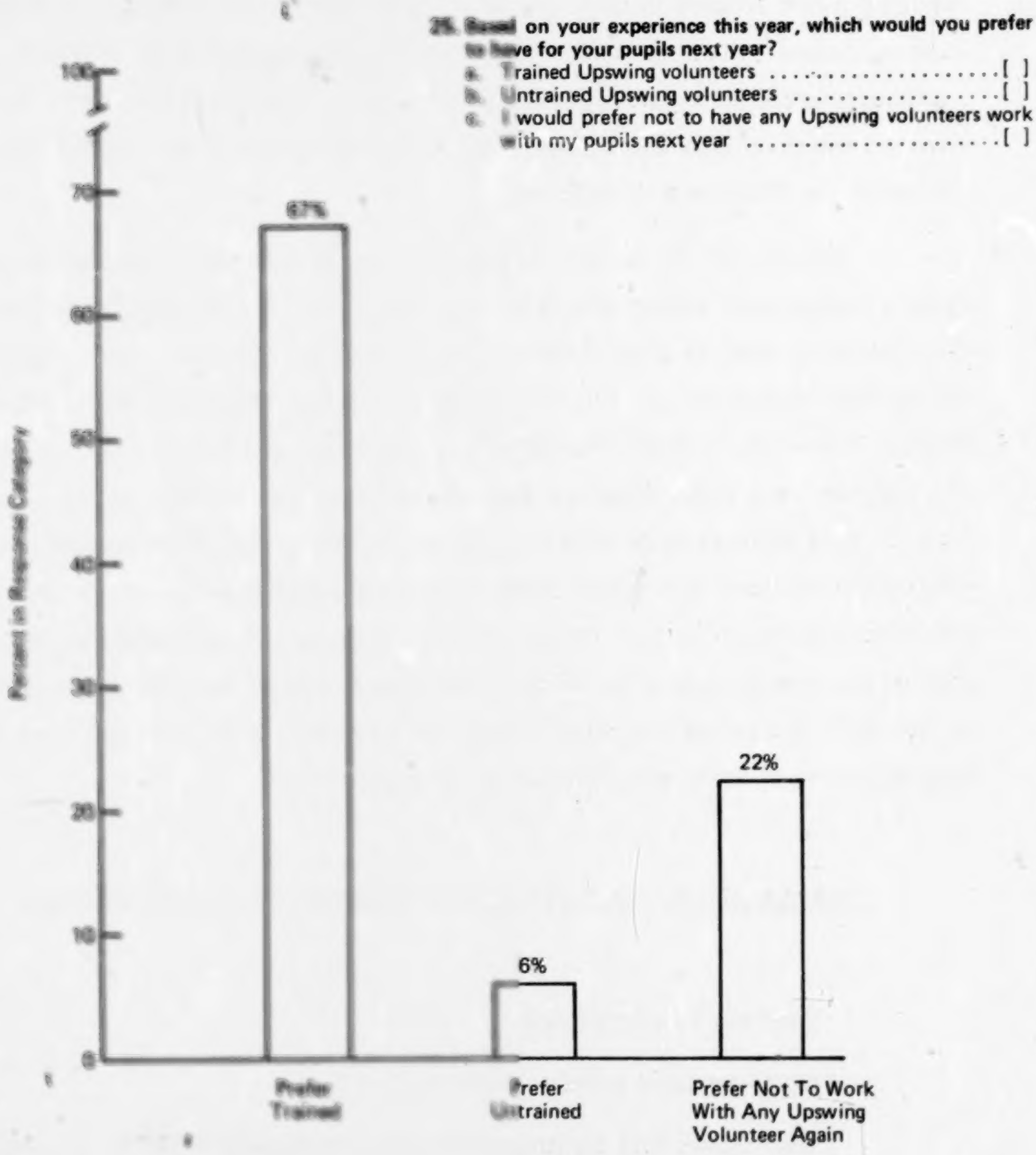


FIGURE 3.22. TEACHERS' UNDERSTANDING OF PROJECT UPSWING AND THEIR ROLE IN IT, ALL CITIES
(Nonresponse to question: 2%.)

TABLE 3.23

A BREAKDOWN OF TEACHERS WHO DID OR DID NOT UNDERSTAND PROJECT UPSWING AND THEIR ROLE IN IT, BY CITY

Understood Project	Denver	Oxford	St. Louis	San Francisco	Total
Yes	27 59%	10 59%	8 40%	15 68%	60 57%
No	19 41%	7 41%	11 55%	6 27%	43 41%
No response to question	0 0%	0 0%	1 5%	1 5%	2 2%
Total	46 100%	17 100%	20 100%	22 100%	105 100%



25. Based on your experience this year, which would you prefer to have for your pupils next year?
a. Trained Upswing volunteers . . . . [ ]
b. Untrained Upswing volunteers . . . . [ ]
c. I would prefer not to have any Upswing volunteers work with my pupils next year . . . . [ ]

FIGURE 3.23. TEACHER PREFERENCE ABOUT WORKING WITH UPSWING VOLUNTEERS AGAIN, ALL CITIES (Nonresponse to question: 5%.)

well prepared trained versus untrained volunteers were for their work as tutors (Figure 3.19 and Table 3.20). It also would appear to relate to teachers' preferences about helping volunteers (assuming they believed trained required less direct support), and most likely to the higher rate of attrition for untrained volunteers.

Table 3.24 (at the end of the section) breaks down teacher preferences about working with volunteers again by city. The only meaningful difference, and a striking one, is that in Oxford only 6% of the teachers (one) preferred not to work with Upswing volunteers again, versus about 25% in all other cities. If the one Oxford nonrespondent answered negatively, the percentage who did not want to be involved again would still be half that in the other cities. This difference is probably related to the personal relationships more readily established in a small town; to the team-teaching, more or less open classroom approach in both Oxford schools (teachers accustomed to working with others and to movement in the classroom); and to the strong effort made by the project director and staff to ensure harmony by maintaining unusually frequent contact with both teachers and volunteers.

Teacher Comments Related to Their Satisfaction With Upswing

"Tutoring had no effect."

"Children have more 'self worth' realization."

"Both David and Cynthia made better progress after their volunteer stopped coming."

"It has been a tremendous help for both these children. It has helped us find out many things that will help these children. It was discovered that one child was perceptually handicapped and will receive special training next year."

(Teacher Comments Related to Satisfaction With Upswing, Cont)

"I'm completely sold on the project. The child taking part would not have been able to make near the progress in a group situation. The trained tutor worked tirelessly in providing experiences beneficial to his progress. Contact with the directors were helpful and frequent. I'm very pleased to be in the program this year."

"The child had quite a problem, but with the help of the volunteer, progress was made."

"The child who made greater gains was not tutored regularly at all."

"The trained Upswing volunteers helped my students so very much. Students who could not write their names in December '71 are now ready for second grade."

"In my classroom this year I have two students who would not be moving to second grade had it not been for the faithful work of the volunteer Upswing people. It is a great program with lasting possibilities."

"Upswing gave the boys in my class more time to learn on their own level of interest and maturity. They would have lost their desire to learn and school could have become a bad experience."

-Teachers' Understanding of the Project and Their Role-

"We weren't told anything about the project."

"I do now (understand my role). However, it was not made clear at the beginning of the project."

"Not too sure about my role."

"No one seemed to know what was going on. Thus, this was how the whole program was carried out."

(Teacher Comments Related to Satisfaction With Upswing, Cont)

"I will only participate if I have trained tutors, otherwise it's a waste of time for children involved and myself."

"All tutors should be trained and screened for reliability."

"Trained volunteers would be able to get to work and accomplish in the short time they are available."

"I like the program but I think the children would in most cases do better with a trained tutor."

"I don't care if they're trained or untrained so long as they are mature, dedicated, faithful in attendance and don't need a lot of guidance."

TABLE 3.24

TEACHER PREFERENCE ABOUT WORKING WITH UPSWING VOLUNTEERS AGAIN, BY CITY

Teacher Response	Denver	Oxford	St. Louis	San Francisco	Total
Prefer to work with trained	30 65%	14 82%	13 65%	14 64%	71 67%
Prefer to work with untrained	3 7%	1 6%	1 5%	1 4%	6 6%
Prefer not to work with any Upswing volunteer again	11 24%	1 6%	5 25%	6 28%	23 22%
No response to question	2 4%	1 6%	1 5%	1 4%	5 5%
Total	46 100%	17 100%	20 100%	22 100%	105 100%

IV. CASE STUDIES

This section is included to give fuller, more personal insight into the workings of Project Upswing than is possible from statistical analysis. The data were obtained in interviews conducted in April and May 1972, by the ORI study team, with a random sample of children and their associated volunteers and teachers. Thus a complete Upswing relationship is examined in each case. The basis for case selection is given at the beginning of each individual analysis.

BILLY FORTHWRIGHT, AGE 7½

Reason for Case Study

Billy had the largest negative achievement change (WRAT standard score) of the children with trained volunteers for whom we have full data.

Description of Child. Billy is small, slender, and bright-eyed—a friendly, high-strung child who appears intelligent but highly distractible. His parents are divorced and he lives alone with his grandmother. He is presently being treated with drugs for hyperkinesis, but was not at the beginning of tutoring.

Billy seems to feel that the children around him are hostile forces that he must guard against. He said that the other children seem to always get him in trouble. In fact Billy appeared to have obsessive thoughts about other children posing threats to him. Such thoughts were a main source of distraction during his interview. This condition could well be caused by his physical impairments.

Physical Condition. Billy has a harelip that could make him the recipient of much peer disdain or teasing. To complicate matters, he is hard of hearing, which is often the cause of anxiety related to peer approval. Billy's volunteer reported that he also suffers from a condition that is causing gradual blindness. In general, Billy suffers from a complex of perceptual difficulties that would make reading hard for anyone. He should not have been considered for the Upswing sample; he requires special help beyond the Upswing volunteer's training.

Billy's Volunteer, Mrs. Marquit. Mrs. Marquit became a volunteer because she enjoys working with children on a one-to-one basis. Although she had no specific knowledge of or experience with children having special learning problems, she worked previously as a teacher aide and has raised four children of her own.

Mrs. Marquit is over 60 years old and married. She had a few years of college, but did not earn a degree. Her husband is a professional with an advanced degree. Their family income is above $25,000 per year.

At first Mrs. Marquit did not feel she needed special training, but she was placed in the volunteer group that was to receive training. Nevertheless, as one might expect, when she started working with Billy she found her training inadequate. Most of it was not applicable to her situation. She did find that the learning games she was taught in Upswing were helpful.

Despite her difficulties, Mrs. Marquit was a faithful volunteer, attending most tutoring sessions. She felt that Upswing is important, seeing a need for volunteers to provide individual attention because of a teacher shortage. She also felt that she could have been more effective with a child showing less pathology.

Mrs. Marquit was able to establish close rapport with Billy. He appeared to trust her. The teacher felt the child benefited by Mrs. Marquit's visits and said he looked forward with great anticipation.

Billy's Teacher, Mrs. Sigel. Mrs. Sigel is about 35 years old and had been teaching for 1 year before the Upswing experiment. She has her BA degree, with six hours of special graduate training in working with children who have special learning problems.

Upswing was Mrs. Sigel's first experience with volunteers. Upswing volunteers were assigned to two of her pupils and she said she enjoyed working with them. She felt that they gave her ideas that she could use with other children. Her only complaint was that the volunteer schedule was not convenient to her, although she hesitated to change that for fear of losing the volunteers.

Mrs. Sigel felt that Upswing would benefit most children and had only a marginal preference for trained volunteers because "they require less guidance." She was willing to devote up to 4 hours per week to Upswing related activity. In general, it appeared that Mrs. Sigel participated in Upswing gladly, feeling that her role was quite clear.

Child's Progress. Mrs. Sigel chose Billy for Upswing after only a short acquaintence. She felt she may have made a mistake in that his problems were quite severe. Nevertheless, her first impression of his response to the volunteer was that his behavior in class improved, although his reading did not. Mrs. Marquit believes Billy is emotionally disturbed. It appears that some of Billy's emotional problem is due to an unusual form of sibling rivalry. His older brother lived with the mother (apparently a favored position). This seems to have made Billy feel rejected and severely damaged his self-esteem. Having an adult volunteer enter his life, even for only two hours per week seems to have helped build up his ego. Later during the year

Billy's brother died. This event was followed by a considerable increase in Billy's drive to communicate with the volunteer which produced a moderate improvement in his ability to express ideas verbally. Billy's feelings of self-command were bolstered by the drug treatment of his hyperkinesis. The next result was a significantly elevated self-concept and increased ability to communicate.

No improvement in his reading skills was recorded either by the teacher, or by the WRAT. All observations show that despite the important gains noted above, Billy fell further behind in relative class position in reading. This is all that could be expected in view of his serious perceptual handicaps.

Conclusion

If quality of life is relevant to our research (and we at ORI believe it is), Upswing was an unqualified success for Billy, even though his reading did not improve. This kind of benefit will not show in the statistical findings of Upswing, which deal primarily with testable criteria for success. However, the quality of Billy's life has so improved that it is reasonable to expect that if he gets proper eyeglasses and a hearing aid, his reading will be up to normal in a few years.

GLENN ARTHOR, AGE 7½

Reasons for Case Study

Glenn had the largest negative achievement change of children with untrained volunteers for whom we have reasonably complete data.

Description of the Child. Glenn is a very slender, hyperactive, highly distractible child who appears to have severe emotional problems. He has average overall potential, but has poor visual motor coordination. As might be expected, Glenn feels very much at the mercy of forces beyond his control, both from within (hyperkenesis) and from without (authority figures). His reaction to authority appears to be very negative. He has a strong psychological opposition to anything he sees as "work," which he refuses to attempt.

This aversion to work is clearly related to the boy's fear of work-related failure and expected resulting peer rejection. He says, "I hate to do work because they (peers) will think I'm too dumb and think backwards, but I don't!"

His insecurity in the school situation is manifested in primitive classroom behavior as well as by withdrawal.

Physical Condition. Glenn is in reasonably good general health except that he suffers from a nonspecific neurological impairment which causes his severe hyperkenesis. He has undergone several drug treatment series with only moderate success. This overt condition is the prime reason for his referral as an Upswing candidate.

Glenn's Volunteer, Mrs. Killington. Mrs. Killington became an Upswing volunteer because she enjoys working with children. She has a child with a learning disability in her own family which provided her with valuable experience she wished to use. In addition, she has been a teacher of elementary school children but did not have a job during the 1971-72 school year. Upswing provided her with an opportunity to get to know the school system.

Mrs. Killington is 25 years old and married. She has completed her BA in teaching and attended graduate school. She tutored for Upswing between jobs, and has gone on to be a teaching assistant in the school system. While she was with Upswing, she was a faithful volunteer. Mrs. Killington's husband is a construction worker with a high school education. Their family income is about $10,000 per year.

Mrs. Killington feels that she would have benefited from training. She feels that Glenn's problems were so severe that she needed someone to consult with her on her activities. She was somewhat insecure in her role because she felt torn between working on Glenn's reading or on other problems more immediate. She finally decided to work with Glenn as "a person not an experiment." She started working on his motor skills and developing a relationship with him. Thus, she was able to establish a meaningful relationship with Glenn in that he learned to trust her and looked forward to her visits.

Glenn's Teacher, Mrs. Farquar. ORI knows very little about Mrs. Farquar. Glenn was transferred to her room after two months with Mrs. Valdez. Mrs. Farquar, although she became an active member of the Upswing movement, was not reported to ORI as an Upswing teacher. Thus, she did not receive any of the Upswing questionnaires. Nevertheless, Mrs. Killington describes her (Mrs. Farquar) as a warm, competent teacher, who took time to discuss Glenn's problems and progress. Glenn's original teacher, Mrs. Valdez, did not feel that the Upswing movement was likely to succeed. Her attitude appears to have been generally negative. It is therefore, probably fortunate that Glenn was transferred.

Child's Progress. Glenn could not be expected to function effectively in a normal classroom. His overt behavior symptoms make him stand out as an object of ridicule. His resultant emotional reaction has been to avoid teasing by avoiding failure by avoiding "work." He was selected for Upswing for wrong reasons—his behavior. His problems are far more severe than Upswing was designed to deal with. Nevertheless, Glenn has made significant progress, but not in reading.

The interest Mrs. Killington showed in Glenn has helped him overcome some of his hostility toward authority figures. It appears that Glenn has been able to increase the size of his vocabulary and has taken an interest in sounding out new words. Much progress appears to be related to Glenn's drug therapy. As one would expect, his performance is inversely related to his level of hyperactivity. In addition, Mrs. Killington has helped to get Glenn into a speech therapy group and a remedial reading class.

Conclusion

It is clear that Glenn's progress in the classroom will be poor at best until some means is found to fulfill his deep need for peer acceptance and self worth. Upswing was a total failure with Glenn if you consider only measurable criteria such as WRAT scores, or even classroom performance. Glenn, however, found a friend, probably his first, who believed in him and liked him. He liked that.

MICHAEL (MIKE) EDWARDS, AGE 6

Reason for Case Study

Mike had the largest positive achievement gain among the children with trained volunteers for whom we have complete records.

Description of Child. Mike is a shy boy of average ability, who appears to be moderately hyperactive. He is an eager boy whose enthusiasm for learning has grown with Upswing. Mike was able to read a little, with help, at the beginning of the project, and was able to establish a comfortable relationship with his tutor. It is somewhat difficult to understand what criteria Mike's teacher used in selecting him for this project. Perhaps she was concerned about his shyness more than his reading.

Physical Condition. Except for mild hyperactivity, Mike is in good health.

Mike's Volunteer, Mrs. Donker. Mrs. Donker is a 58-year old homemaker who has no previous training or experience with children having special learning problems. She volunteered because the idea of catching these problems early, before they become serious, was a good idea. Mrs. Donker is married to a professional man whose income is over $25,000 per year. They have raised two children who are no longer in the home. This fact has provided the spare time needed to prepare for tutoring activities.

Mrs. Donker was an intelligent, sensitive, and enthusiastic volunteer who prepared lessons in advance, but was flexible enough to abort her plans when necessary. She felt frustrated by the short-term intensity of training, and suggested that more of it should come as inservice training. She found DISTAR too cumbersome to use and resorted to her own mixture of using classroom materials, writing and telling stories, flash cards, and games. She feels that, in the first few weeks, the tutor should devote one hour per day to the child in order to establish an "easy rapport which can turn into early success." Mrs. Donker was able to establish an easy rapport with Mike, who seemed to have been enthusiastic about their meetings. The boy's teacher, however, saw Mrs. Donker as a "pain in the neck and uncooperative." For unknown reasons, Mrs. Donker dropped out of Upswing in March 1972.

Mike's Teacher, Mrs. Wolper. Mrs. Wolper is about 35 years old, and has been teaching 6 years. Five of those years have been spent as a first-grade teacher. She has had one course in education of children with learning problems and also a supplementary workshop. In addition, she has had experience working with volunteers.

In general, Mrs. Wolper expressed contempt for Project Upswing calling it "a miserable flop." Overt hostility towards the volunteers has been evident; she refused to aid them in any way. She considered one volunteer to be a "nuisance" and another to be a "pain in the neck." There is reason to believe that Mrs. Wolper is a reasonably good teacher, but she manifests great insecurity as a teacher, resenting any implication that she may need help. She complains that volunteers do not understand the problems a teacher has to deal with, but makes no attempt to discuss such problems with the tutor. In the final contact she claimed that the children didn't really need help to begin with, and that they had made no special progress under tutors.

Child's Progress. Mike was perhaps chosen for Upswing for the wrong reasons. He was reading (with help) from the beginning. It appears that he had a problem with verbal communication. Thus, Mrs. Donker decided to make "independent reading" her goal for Mike by the end of the term.

At the beginning of the year Mike was afraid to make mistakes and thus, hesitant to become fully involved in the tutoring process. Nevertheless, as time progressed, Mrs. Donker was able to gain the boy's trust. He relaxed and began to show an eagerness for learning. The individual attention seems to have sparked an increase in Mike's feeling of self worth. His peer relationships do not seem to present problems and his academic progress has probably been greatly accelerated. As might be expected, there is a serious discrepency between the test results and teacher observation. Test scores show dramatic improvement, while teacher observation shows the boy falling behind.

Conclusion

Mike Edwards derived significant social and academic benefit from Project Upswing. It is interesting that such progress was possible under the worst conditions of volunteer-teacher relationship. It is, unfortunately, possible that some of Mike's great gains could be due to an excess of attention from a highly competitive, threatened teacher out to prove her own self worth. This is speculation, however, and cannot be substantiated by the evidence at hand.

PARNELL BEAUFORD, AGE 6½

Reason for Case Study

Parnell had the highest increase of the children with untrained volunteers for whom we have reasonably complete data.

Description of Child. Parnell is a friendly, cooperative child who related well to adults. He is of borderline low-average intelligence, and has good visual motor coordination. It is interesting to note that although Parnell's IQ measures quite low, he seems to be a reasonably bright child. He has a good attention span, manifests social confidence.

Physical Condition. Parnell is in good health.

Parnell's Volunteer, Miss Blue. Miss Blue was under 21 years old, and a junior at the University. She is not married. At the time she volunteered, Miss Blue had no experience or course work in working with children with special learning problems. Miss Blue wanted to receive Upswing training, but her schedule did not allow time for it, so she became an untrained volunteer even though she attended a few training sessions.

Miss Blue is an enthusiastic young volunteer who appears intelligent and sensitive to children. She was raised in a culturally rich atmosphere by a reasonably well-to-do family.

At first Miss Blue felt "sort of lost" as a tutor, but with the teacher's help she gained confidence.

Parnell's Teacher, Miss Deposit. Miss Deposit has had long experience in teaching. She has taught 24 years in all, 18 of which have been in first grade. She is in her late 40s and appears to enjoy teaching young children. In addition, Miss Deposit has shown marked enthusiasm for Project Upswing. She has had several undergraduate courses in work with children having special learning problems and has had previous experience with tutors.

Miss Deposit feels that Upswing volunteers require little supervision, at most 1 hour per week. She was willing to discuss child progress and help coordinate tutoring and classroom activities and provide untrained volunteers with work sheets and other materials.

In general Miss Deposit participated in Upswing gladly, feeling that her role was to help the project be a success.

Child's Progress. It appears that Parnell was chosen for Upswing primarily because of his confusion over verbal instructions and his early difficulty with reading. His VMI scores were average and he is not hyperactive. He gave willing cooperation to the volunteer from the very beginning. Parnell was willing, but not enthusiastic, about missing class activities for the tutoring sessions. Miss Blue has spent most of the tutoring time working on class-related activities, but has also taken Parnell for walks and other unstructured activities.

Miss Blue feels that Parnell has expressed himself freely throughout tutoring, but appears to lack self-confidence. She feels that the boy is highly distractable and has seen little improvement in this area. Parnell still has problems understanding verbal instruction, and in expressing himself clearly, but he has made great strides of improvement in sounding out new words, and understanding what he reads and in increased vocabulary.1/

1/ It is interesting to note that he can comprehend more in reading than he can in conversation. This is a strong indication of auditory aphasia (word

Despite difficult tutoring conditions, (a dark, noisy, basement storage room with constant interruptions), Parnell seemed to enjoy his sessions and profit from them. His teacher saw significant improvement in the area of reading, language skills, ability to express himself in class, and self-esteem. In general, he has advanced in all subjects towards the class average. Parnell also paid more attention in class. The WRAT post-test indicates that Parnell is up to national averages in reading performance, a feat one would find improbable for a child with an IQ of 75. Parnell's true IQ is probably a good deal higher, but performance is down due to his perceptual handicaps.

Conclusion

Parnell is one example of a child who might have been tracked into the lower academic expectancy groups either formal or informal because of low measured IQ. Upswing has helped Parnell to elevate his personal performance and esteem. It has also helped to enlighten the school system about his unusual performance. Parnell's volunteer has been able to teach. Miss Blue, who wants to be a teacher, has gained valuable experience and confidence. Miss Deposit has found a useful resource to help her do a better job. But, most importantly, despite an auditory perceptual block, Parnell has been able to learn, more than anyone expected.

---

deafness). In such cases the child often does better on written group IQ tests than he would in the Slossen individual test which relies heavily on verbal interaction.

V. COST-EFFECTIVENESS ANALYSIS OF PROJECT UPSWING'S FIRST YEAR

PURPOSE

This section is designed to look at the cost of having a trained and an untrained volunteer tutor a first-grade child who has learning problems, in relation to the gains that can be expected for the child as a result of tutoring. ORI has computed the relative total cost for each volunteer group per unit of achievement gain. We also estimated the approximate increase of volunteers and children the present budget could accommodate, describing the marginal cost to add one more volunteer to the project after saturation under present funding.

METHODOLOGY

The total cost incurred for Project Upswing's operation was distributed among the following:

- Trained volunteers who tutored for the whole year
- Untrained volunteers who tutored for the whole year
- Trained volunteers who attrited during the year
- Untrained volunteers who attrited during the year.

These costs were calculated based on the percentage of volunteers who were involved in the project at the time the costs were incurred. All costs were calculated for each city and were averaged to simplify the discussion.

In figuring the dollars spent for each volunteer group, the cost categories were split into direct and indirect costs.

Direct Cost

The direct costs were those incurred in providing direct services to volunteers. Some pertain to trained and untrained volunteers together, some just pertain to the trained, and some just pertain to the untrained. (Remember that these costs include those volunteers who attrited throughout the year.) Table 5.1 shows how the costs were distributed by category. The costs were calculated based on the percentage of time (man-hours) the Upswing staff spent on each task (except the cost of materials, which did not involve staff time).

Indirect Cost

The indirect cost consists of such things as internal evaluation time, child testing, teacher fees, and fringe benefits for project staff, as well as portions of the cost of project management and secretarial time. These costs were distributed on the basis of the number of volunteers participating during the 10-month span of the project. For example, a fifth of the indirect cost was distributed among all volunteers who were still in the project between November and December.

Marginal Cost

The marginal cost was calculated on the basis of what costs were considered to be variable. The cost-per-volunteer in each category considered variable was computed. These were added to give the marginal cost. This was done for both trained and untrained volunteers.

TABLE 5.1

DISTRIBUTION OF DIRECT COSTS TO THE VOLUNTEERS

Direct Cost Categories	Trained	Untrained
Recruitment	X	X
Management and operations of project	X	X
Secretarial	X	X
Preservice training	X	—
Inservice training	X	—
Supervision and assistance of volunteers	X	X
Materials	X	—
Orientation for untrained	—	X

DATA SOURCE

A cost analysis form was sent to the Upswing project director in each city at the end of the first year. (See Appendix for copy of form). The directors were to include estimates of the percentage of time spent on the project for each staff member, the cost of materials, and miscellaneous expenses incurred in the project.

SUMMARY OF FINDINGS FROM THE COST ANALYSIS

The cost analysis for Project Upswing's first year revealed the following:

- Trained volunteers clearly cost more than untrained volunteers.
- The cost per mean point gain in achievement is considerably higher when a trained volunteer is used than when an untrained volunteer is used.[1]
- The marginal cost for a trained volunteer was about seven times as great as the marginal cost for an untrained volunteer.

COST OF A VOLUNTEER

As expected, a trained volunteer cost more than an untrained volunteer in the first year of Upswing. This was partly because of the cost of training and partly because the Upswing staff generally spent more time in guiding and supervising the trained volunteers throughout the year. The dollar amount spent for each trained and untrained volunteer were as follows:

---

[1] In Section II of this volume it is pointed out that there was no significant difference between the reading achievement gains of children tutored by trained and by untrained volunteers.

Volunteer Category	Cost Per Volunteer
Trained volunteer	$377
Untrained volunteer	$213

The data show over a $150 difference in the amount of money spent for a volunteer of each kind.

Losing a trained volunteer was also more expensive. The dollar loss when a trained volunteer attrited was almost 3 times the loss incurred when an untrained volunteer attrited:

Volunteer Category	Cost Per Volunteer
Attrited trained volunteer	$268
Attrited untrained volunteer	$ 92

Marginal Cost

The city directors were asked to estimate the number of additional children that could be supported within their 1971-72 Upswing budgets. The average from the four cities indicated that 70 more children could be tutored beyond the 100 called for in the project design. This means that the cost of the project would not be affected until a volunteer was recruited to tutor the 171st child.

The cost of bringing in an additional volunteer, beyond the limit of 170 under the 1971-72 budget, was computed from the estimated amount spent per trained or untrained volunteer in each of the cities. The variable cost categories listed in Table 5.2 were used to compute the marginal cost of having a child tutored by an Upswing volunteer. Summing the columns, it turns out that to add one more trained volunteer to the project would cost about $219, while to add one more untrained volunteer, it would cost $31.

TABLE 5.2

ALLOCATION OF VARIABLE COSTS

Variable Cost Category	\$ Cost/ Trained Volunteer	\$ Cost/ Untrained Volunteer
Materials	46	—
Supervision and assistance to trained	79	—
Supervision and assistance to untrained	—	19
Training	82	—
Management and operations of project	12	12
Total	\$ 219	\$ 31

COST-EFFECTIVENESS

Section II of this volume indicated that the mean standard score of tutored children went from the low-average range to the average range on the WRAT over the school year. The mean point gain was 7 points for children who had trained volunteers and 8 points for those who had untrained volunteers. The Student's T-test showed that the differences in amount of score change between the two groups of children were not statistically significant; i.e., training apparently made no difference in the volunteer tutors' effectiveness.

From Table 5.2, the cost to go up one WRAT standard point was $55 for children who had trained volunteers and $27 for children who had untrained volunteers. That is, the cost per unit of gain was approximately twice as high for the trained than for the untrained volunteer.

TABLE 5.3

COST OF TUTORING PER MEAN POINT GAIN IN READING SCORE

Volunteer	Mean Cost/ Tutor	Total Mean Point Gain on the WRAT	Cost/Mean Point Gain
Trained	$377	7	$55
Untrained	$213	8	$27

From the facts presented in this section, it appears that it is not monetarily sound to have trained volunteers tutor children when the untrained do as well and cost less.

All volunteers that have been recruited into the second year of Upswing have received training. The decision to train all was made prior to the final results reported here. ORI feels that this decision made by city directors was justifiable. We have stated that teachers said they preferred to work with trained volunteers; volunteers preferred to be trained; training evidently contributed to volunteers' commitment to the project; and, most importantly, it is agreed that many improvements could be made in the content and format of training given in the first year. From volunteer and teacher questionnaire responses and from ORI's sample of interviewees, the training was reported to be too general, the materials that the volunteers were trained to use were not designed for one-to-one instruction, and volunteers wanted more specific help in diagnosing their pupil's problems. ORI is evaluating the training given in the second year in depth to determine the effects of improvements in that area on the tutored children's achievement. Since there will be no comparison groups of volunteers and children for the Phase II evaluation, we will consider training as part of the overall project design and operations in each city, which can be compared with the project approach used in the first year.

VI. ANALYSIS OF VOLUNTEER ATTRITION

PURPOSE

Attrition is a very important factor in the management of any volunteer program. It is essential to know whom to recruit and whom not to recruit to ensure a successful tutoring program.

This section first presents the attrition rates and then describes the volunteers who left Project Upswing during the course of the 1971-72 school year in terms of when they dropped out, reasons given, and personal characteristics. The analysis attempts to relate these factors, and also considers the possible impact of recruitment timing and procedures on attrition. Conclusions concerning attrition are presented at the end of the section.

DATA SOURCES

The data presented in this section were taken from:

- Information about recruitment procedures gathered by ORI during site visits and from the university project directors' mid-term reports
- The Upswing Volunteer Attrition Report form, which includes training status and date and

reason for leaving

- The volunteer registration form (for personal background information)
- Questionnaire comments and volunteer interviews.

ORI made initial site visits to each of the Upswing cities, obtaining detailed information on recruitment procedures.[1] Also, the city project directors included a section on recruitment in their mid-project reports. This information will be used in conjunction with the causes and timing of attrition.

The attrition card (see Appendix) was a prepaid, self-addressed postcard that was to be mailed directly to ORI as soon as a city was notified that a volunteer had dropped out. The form includes the training status of the volunteer and the date and reason for leaving. ORI ran into some difficulty throughout the year getting complete data. See "Parameters of the Population" for further discussion.

A separate computer run was made from the volunteer registration form data to secure a profile of only those volunteers who dropped out of the project. The profile is not as detailed as the profile of all volunteers,[2] since only certain items are of interest in this analysis.

Questionnaire comments and volunteer interview comments were used to clarify and substantiate data when needed.

PARAMETERS OF THE POPULATION

At the start of the 1971-72 year ORI requested that the city directors complete an attrition card for a volunteer who dropped out only if she (he) had filled out the volunteer registration form. It was felt that these people who actually registered could be truly considered part of the Upswing project.

---

[1] See ORI's Evaluation of Project Upswing, Interim Report, TR No. 700, January 1972.

[2] See ORI's Final Report on the Evaluation of Project Upswing's First Year, Volume I: Profiles of Participants and Their First Impressions of the Project, TR 731, July 1972.

It is ORI's understanding that the city staffs lost contact with some of the volunteers and thus could not get the necessary attrition information. Volunteers failed to notify the project staff that they were quitting and the schools did not always report it when volunteers failed to come or stopped coming. Telephone calls were made to collect the necessary attrition information from known attritees, but these efforts were at times unsuccessful. That is why a large percentage of the volunteers had "unknown" listed as reason for leaving.

Table 6.1 shows the number of registered volunteers, by status group (trained and untrained), each city had at the start of tutoring versus the number of attritees. It also gives these data for the project as a whole. Denver, Oxford, and San Francisco had very similar rates of attrition for both trained and untrained volunteers. St. Louis had somewhat lower rates, especially for the untrained group. Attrition among untrained volunteers was significantly higher in all cities. This is reflected in the Total row of Table 6.1, where 55% attrition is shown for untrained versus 33% for trained volunteers.

SUMMARY OF FINDINGS IN THE ANALYSIS OF VOLUNTEER ATTRITION

- Attrition was significantly higher among untrained volunteers. This is largely attributable to a heavier concentration of college students in that group, although even among students, the untrained dropped out more often. ORI believes that untrained volunteers, as a group, felt less strongly committed to the project then trained volunteers.
- Attrition peaked for untrained volunteers between the time of registration and the start of tutoring, and again in February. Attrition peaked in

TABLE 6.1

DISTRIBUTION AND ATTRITION RATE OF PROJECT UPSWING VOLUNTEERS, TRAINED AND UNTRAINED, BY CITY

City	Trained		Untrained	
	Registered	Dropped Out	Registered	Dropped Out
Denver	68	24 (35%)*	48	29 (60%)*
Oxford	50	17 (34%)	52	30 (58%)
St. Louis	55	14 (25%)	46	19 (41%)
San Francisco	50	19 (38%)	38	23 (61%)
Total	223	74 (33%)	184	101 (55%)

* Percentages of total number of volunteers who registered.

February for trained volunteers. These data suggest (1) that untrained volunteers may have lost interest or made other commitments during a rather long waiting period while the other group was being trained and the children were being identified and tested; and (2) that changes in college students' class schedules were a significant cause of attrition.

- Volunteers' stated reasons for dropping out of Upswing point to external causes rather than to dissatisfaction with the project.
- Age was related to attrition, but student status appears to have been a strong mediating variable. Volunteers under-21, and to a lesser extent, those 21-30, were over-represented in the attrition population. Volunteers 41-50 years old were somewhat under-represented in the attrition population.
- Homemakers had the most staying power. The percentage of homemakers in the attrition population was lower than the percentage of homemakers in the original population.
- Volunteers in all other occupational categories, except student, (i.e., retired, full-time employed, and part-time employed), were represented in the attrition population at about the level they were represented in the original population.
- College students were heavily over-represented in the attrition population.
- Neither previous training in child development nor previous relevant experience (as a tutor, teacher

aide, or teacher) appeared to have any
bearing on volunteer attrition.

DATE OF TERMINATION

From Table 6.2, the highest percentages of untrained volunteers dropped out before tutoring began and in the month of February; almost a quarter of the total of untrained attritees (13% of those who registered) dropped out each time. Attrition among the trained peaked in February; 22% of trained attritees (7% of trained volunteers who registered) left during that month.

Denver, St. Louis, and San Francisco started to recruit volunteers in the early fall (August and September.) Oxford began much earlier. Volunteers did not begin tutoring in any city until mid or late November. During this 3- to 5-month time span, there was little contact with untrained volunteers except for 10 hours of orientation. It is likely that some got tired of waiting or perhaps felt the project was not going to get off the ground. This would account for greater attrition in the untrained group before tutoring began. Oxford only had one person drop out of the project at this time, although recruiting began there earlier than in any other city. It should be understood, however, that the situation in Oxford is unique. The city is small and the project director and staff knew each other. The people were probably informed of the status of the project and were personally encouraged to wait until November to start.

As noted above, during the month of February, 22% of the trained and 24% of the untrained attritees dropped out of Project Upswing. Table 6.2 shows these high rates attributable to losses in Oxford, particularly the untrained volunteers. College students made up 70% of Oxford's original volunteer population. They were about evenly divided between the trained and untrained groups. The new semester at the university began in February, and a great many students had to stop at that time because of change in class schedule

TABLE 6.2

DATES TRAINED AND UNTRAINED VOLUNTEERS LEFT THE PROJECT, BY CITY

Termination Date	Denver		Oxford		St. Louis		San Francisco		Total	
	T	U	T	U	T	U	T	U	T	U
Before tutoring began	5 21%	4 14%	0 0%	1 3%	2 14%	10 53%	2 11%	9 39%	9 12%	24 24%
November	1 4%	6 21%	0 0%	1 3%	1 8%	0 0%	6 31%	4 17%	8 10%	11 10%
December	4 17%	4 14%	0 0%	0 0%	2 14%	3 16%	4 20%	2 9%	10 14%	9 9%
January	2 8%	4 14%	7 41%	5 17%	2 14%	2 10%	0 0%	1 4%	11 15%	12 12%
February	5 21%	2 7%	9 53%	20 67%	2 14%	0 0%	0 0%	2 9%	16 22%	24 24%
March	5 21%	5 16%	0 0%	0 0%	2 14%	0 0%	2 11%	4 17%	9 12%	9 9%
April	1 4%	2 7%	0 0%	0 0%	2 14%	0 0%	2 11%	1 4%	5 7%	3 3%
May	0 0%	0 0%	1 6%	0 0%	0 0%	0 0%	1 5%	0 0%	2 3%	0 0%
Don't know	1 4%	2 7%	0 0%	3 10%	1 8%	4 21%	2 11%	0 0%	4 5%	9 9%
Total	24 100%	29 100%	17 100%	30 100%	14 100%	19 100%	19 100%	23 100%	74 100%	101 100%

or other commitments. Fifty-three percent of Oxford's trained attritees quit in February, along with 67% of its untrained attritees (18% and 58%, respectively, of the city's original groups.) In January, 41% of Oxford's trained attritees dropped out (14% of trained volunteers who registered.) Their reasons for leaving (Table 6.3, page 6-10 and information from the project director show that most of these attritees were seniors in the University of Mississippi's School of Education who had to practice teach beginning in January. Seventeen percent of Oxford's losses from the untrained group occurred in January (10% of the original group.)

St. Louis shows some interesting differences from the other cities in Table 6.2. That city lost 53% of its untrained attritees before tutoring began.[3] This high rate of loss is difficult to interpret except as a function of minimal contact with the untrained volunteers during the waiting period between recruitment and tutoring. It also could be that the St. Louis staff had registration forms filled out more promptly than other cities, so that more people were counted as members of the population. The next most common months of attrition for untrained volunteers in St. Louis were December and January, suggesting possibly, the impact of the holiday season.

St. Louis had an extremely even distribution of trained volunteer attrition over the year. This is an unusual occurrence for which we have no explanation.

Thirty-nine percent of San Francisco's untrained attritees left the project before tutoring began and 17% left in the first month of tutoring. Together, these volunteers represent over half of all of that city's untrained attritees.

---

[3] As noted previously St. Louis had a lower rate of attrition among untrained volunteers than any other city. The 53% represents 10 untrained volunteers lost before tutoring began.

Over half of San Francisco's trained attritees left in the first 2 months of tutoring—November and December.

The high incidence of early attrition here, as in St. Louis, could be related to the waiting period. It also could be related to turbulence surrounding busing to desegregate the San Francisco schools. Another possible factor is that in San Francisco volunteers were generally assigned to the trained or untrained group rather than allowed to choose. Although the reasons for leaving do not indicate this, it could be that some volunteers quit because they were dissatisfied with their assignments. It should be noted that San Francisco's procedure was as called for in the project design; the other cities skirted this requirement for fear of losing volunteers.

REASONS FOR TERMINATING TUTORING GIVEN BY VOLUNTEERS

Table 6.3 shows a by-city breakdown of trained and untrained volunteers' reasons for leaving Project Upswing. As in Table 6.2, the table's percentages are based on numbers of attritees rather than numbers originally in the trained and untrained groups.

The percentage of unknown reasons for untrained volunteers' leaving is much greater in all cities than the percentage of unknowns for trained. This reflects the fact that the project staffs had less contact with untrained volunteers, in accordance with the project design. Because of the large percentages of reason-unknown cases, together with the variability of reasons given, it is difficult to interpret these data beyond saying that they suggest attrition was rarely caused by some aspect of the project experience. This may or may not be true; nevertheless, nearly all reasons given were beyond project control. The only apparent trend is that untrained volunteers, everywhere but in St. Louis, gave "no time" as their reason for leaving more commonly than trained volunteers. This is likely an indication of less commitment to the project on the part of untrained volunteers.

The volunteers from Denver gave a wide variety of reasons for leaving. The most common for both the trained and untrained groups were volunteers either had no spare time for the project, became employed, or moved from the Denver

TABLE 6.3

VOLUNTEERS' REASONS FOR LEAVING PROJECT UPSWING, BY CITY

Reason	Denver		Oxford		St.Louis		San Francisco		Total	
	T	U	T	U	T	U	T	U	T	U
Unwilling to work in assigned school	0 0%	0 0%	0 0%	0 0%	2 14%	3 16%	0 0%	0 0%	2 3%	3 3%
No spare time	3 13%	6 22%	0 0%	3 10%	0 0%	0 0%	1 5%	4 18%	4 5%	13 13%
Transportation problems	1 4%	0 0%	0 0%	0 0%	0 0%	1 5%	0 0%	1 4%	1 1%	0 2%
Can't get along with child	1 0%	0 0%	0 0%	0 0%	0 0%	1 5%	1 5%	0 0%	1 1%	1 1%
Can't get along with teacher	1 4%	1 3%	0 0%	0 0%	0	0 0%	0 0%	0 0%	1 1%	1 1%
Child moved	4 17%	1 3%	0 0%	0 0%	0 0%	0 0%	0 0%	2 9%	4 5%	3 3%
Change in class schedule	0 0%	0 0%	3 18%	22 73%	0 0%	0 0%	1 5%	1 4%	4 5%	23 23%
Practice teaching	0 0%	0 0%	10 59%	0 0%	0 0%	0 0%	0 0%	0 0%	10 14%	0 0%
Illness in family	1 4%	1 3%	0 0%	0 2%	3 22%	1 5%	1 5%	2 9%	5 7%	4 4%
Illness of volunteer	2 8%	0 0%	0 0%	2 7%	3 22%	1 5%	2 11%	1 4%	7 10%	4 4%
Pregnant, adopted child	1 4%	0 0%	1 6%	0 0%	0 0%	1 5%	0 0%	0 0%	2 3%	1 1%
Employment	6 25%	2 7%	2 11%	0 0%	2 14%	2 12%	6 32%	1 4%	16 21%	5 5%
Volunteer moved	3 13%	7 24%	1 6%	0 4%	2 14%	0 0%	2 11%	1 4%	8 11%	8 9%
Confusion of assignment	0 0%	2 7%	0 0%	0 0%	0 0%	0 0%	2 11%	2 9%	2 3%	2 2%
Unknown	2 8%	9 31%	0 0%	3 10%	2 14%	9 47%	3 16%	8 35%	7 10%	29 29%
Total	24 100%	29 100%	17 100%	30 100%	14 100%	19 100%	19 100%	23 100%	74 100%	101 100%

area. Another reason important only for trained volunteers, was "child moved." The Denver metropolitan area is known to have a high percentage of migrant families. This probably was the cause of the 17% of trained volunteers dropping out because their pupils either moved out of the city or to another school.

"Child moved" was given as a reason for leaving by only one untrained volunteer (3% of the untrained attritees.) One can speculate that if we had information for the reason-unknown cases (31%) there would be an increase in the percentage of untrained attritees who dropped out because their pupils moved.

It is also noteworthy that the percentage of untrained attritees who said they did not have time for tutoring was almost twice as great as the percentage of trained attritees who gave that reason. These data can be accepted as valid indicators because the weight of reasons unknown is on the untrained side. ORI believes that training, and more frequent contact by project staff with trained volunteers, made a difference in choices between Upswing and other uses of time.

Students composed about 70% of Oxford's volunteer population. From Table 6.3, they represented the majority of people who attrited in that city. Seventy-three percent of Oxford's untrained volunteers who attrited said they did so because of a change in class schedule; 77% of the trained said they left either for practice teaching (59%) or because of a change in class schedule (18%). The practice teaching factor accounts for the much higher proportion of trained volunteer attrition in Oxford during December and January (Table 6.2), since second-semester practice teaching begins in January.

Oxford, however, recruited volunteers to replace 25 of the 30 untrained volunteers who dropped because of the class schedule at the university or for other reasons. Trained volunteers of course could not be replaced. Oxford was the only city that replaced volunteers.

Table 6.3 also shows that Oxford had a comparatively low percentage of reason-for-leaving-unknown cases among untrained attritees and none among trained. This is another reflection of the degree of communication possible in a small community.

Oxford, like Denver, shows untrained attritees apparently having more time problems than trained. Ten percent of Oxford's untrained volunteers who left the project said they did so because they had no spare time. None of the trained attritees gave that reason.

No important trend was apparent in the reasons for leaving given by St. Louis volunteers. Variations of reasons went from illness in the volunteer's family to securing full-time employment. St. Louis was the only city in which volunteers stated they were unwilling to work in their assigned schools; 14% of the trained attritees and 16% of the untrained felt that way (2 and 3 volunteers, respectively.)

Widespread disparity in reasons for leaving the project also occurred in San Francisco. Becoming employed was the major reason the trained volunteers left Upswing (32% of trained attritees gave this reason.) As in Denver and Oxford, untrained volunteers said they quit for lack of time far more commonly than trained. Almost four times as great a percentage of San Francisco's untrained attritees gave this reason for quitting (18%, versus 5% of the trained attritees.)

PERSONAL CHARACTERISTICS OF VOLUNTEERS WHO ATTRITED

Age

Figure 6.1 shows the percentages in each age range of volunteers who attrited. They were computed from the original number of registered volunteers in each of the age ranges. The figure clearly indicates that the younger volunteers contributed most heavily to attrition.

Sixty-three percent of the volunteers who were under 21 left the project and 50% of those between the ages of 21-30 quit. There was also a peak in the 51-60 age range; 40% of that group dropped out. Approximately a quarter to a

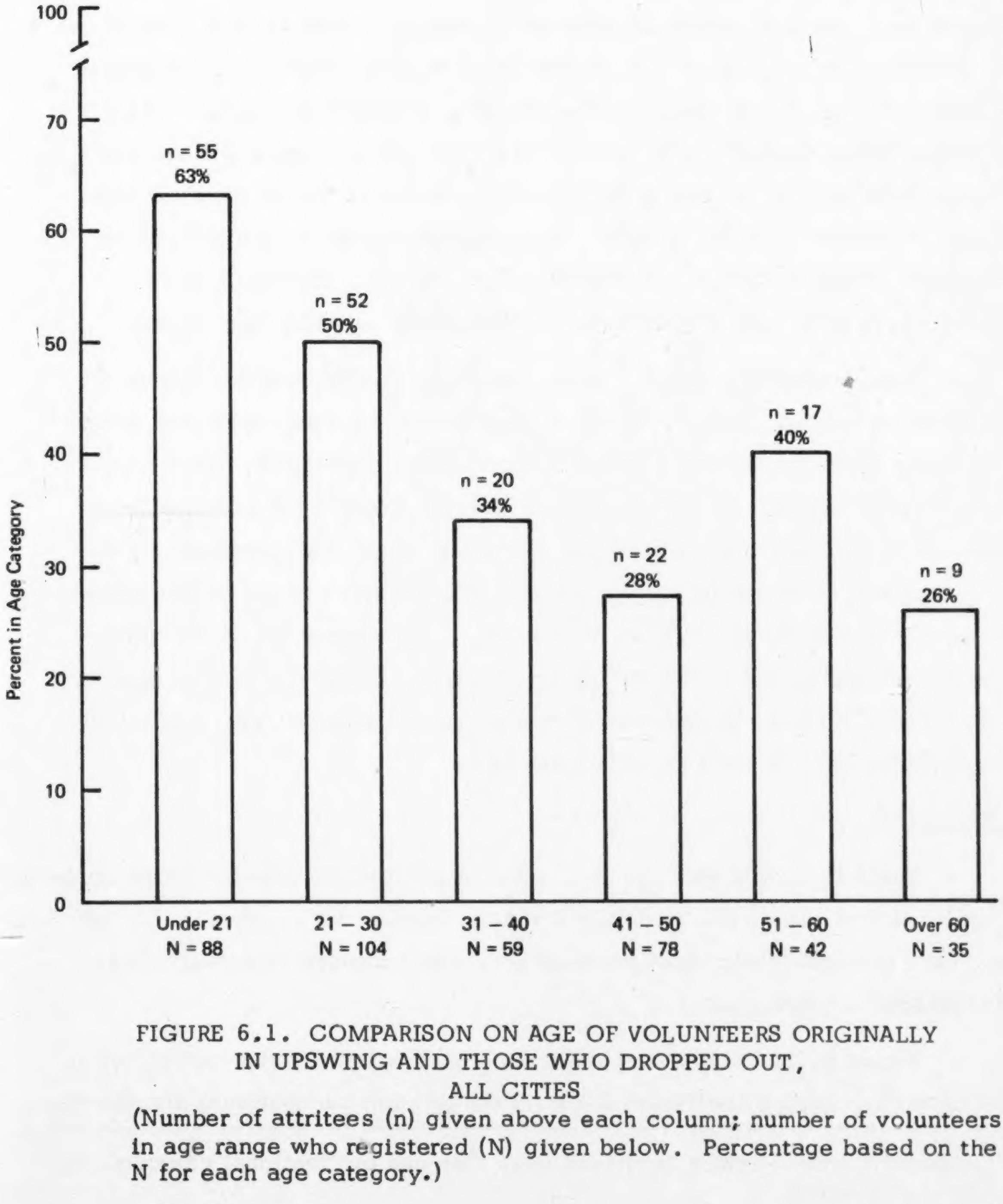


FIGURE 6.1. COMPARISON ON AGE OF VOLUNTEERS ORIGINALLY IN UPSWING AND THOSE WHO DROPPED OUT, ALL CITIES
(Number of attritees (n) given above each column; number of volunteers in age range who registered (N) given below. Percentage based on the N for each age category.)

third of the original population in all of the other age groups dropped out.

Figure 6.2 shows the age distribution of volunteers who attrited by status group. The percentage of untrained volunteers under 21 who dropped out was almost twice as great as the percentage of trained under 21 who dropped out (38% and 22%, respectively.) The volunteer profile from Volume I of the evaluation indicates that close to 100% of people under 21 were college students and that there were more than twice as many of these people in the total untrained population as in the trained. Thus students under 21 account for the higher percentage of untrained volunteers who dropped. The figure shows similar losses of trained and untrained volunteers in all other age groups.

Comparison of Figure 6.2 with Table 3.2 from the original profile of volunteers in Volume I (page 3-8) shows that both trained and untrained volunteers under 21 were over-represented in the attrition population. They represented 14% (T) and 31% (U) of the original groups, but 22% (T) and 38% (U) of attritees. Volunteers in the 21-30 age range also were over-represented, but to a somewhat lesser extent. They made up 27% (T) and 24% (U) of the original groups versus 33% (T) and 27% (U) of attritees. Volunteers age 41-50 tended to be under-represented in the attrition population. Originally they accounted for 21% and 17% of the trained and untrained groups, respectively, while they accounted for 12% (T) and 13% (U) of attritees.

Occupation 4/

Table 6.4 reinforces the point about high attrition among college students. It indicates that 61% of the student volunteers dropped out as compared to only 33% of the volunteers who were homemakers. The homemakers category was least affected by attrition.

Figure 6.3 indicates how much each occupational group contributed to total attrition. Comparing Figure 6.3 with the original occupational distribution

---

4/ Volunteers were allowed to choose more than one occupational category, so there is overlap.

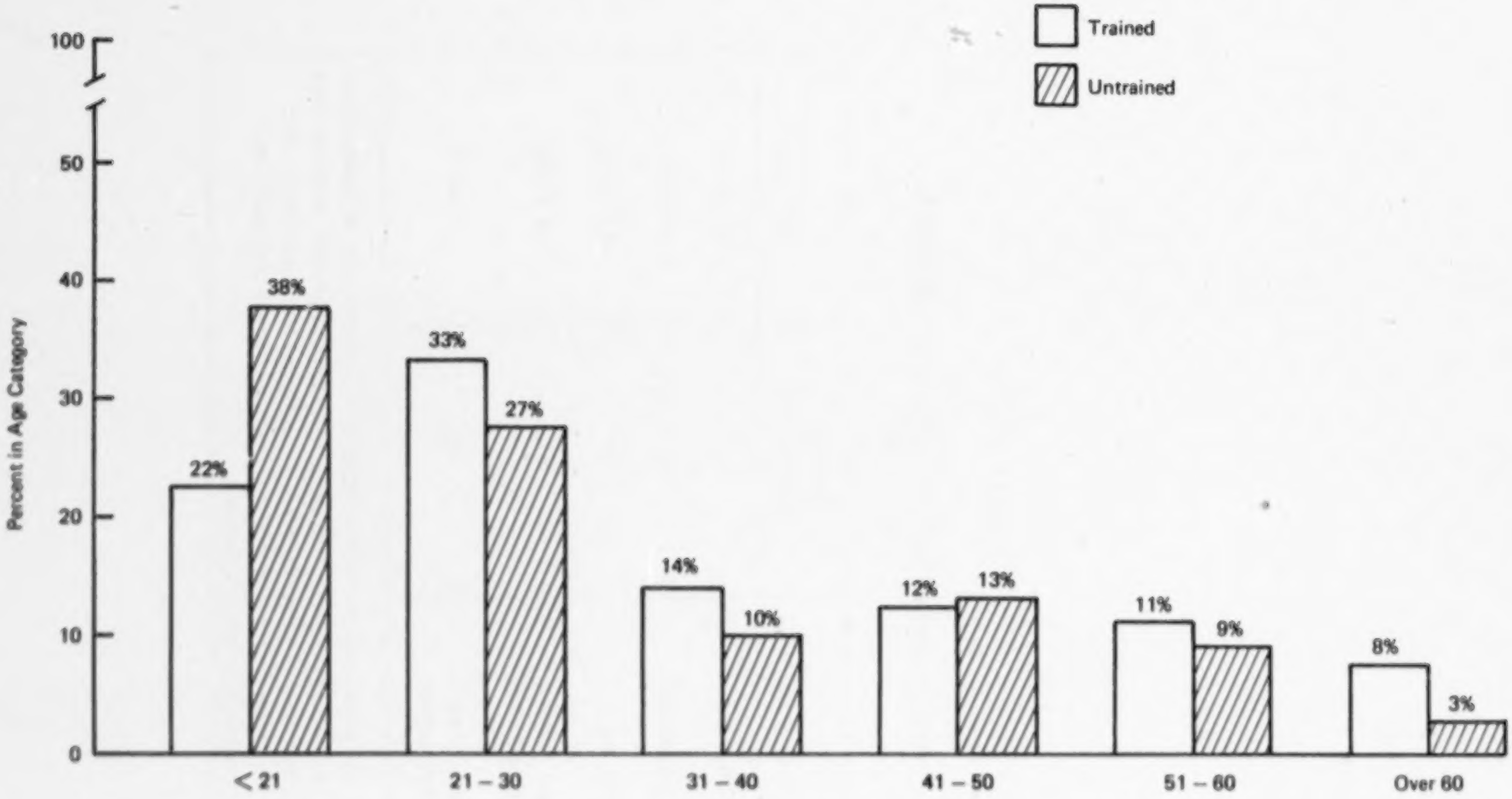


FIGURE 6.2. AGE DISTRIBUTION OF TRAINED AND UNTRAINED VOLUNTEERS WHO DROPPED OUT, ALL CITIES
(Percentages based on total number of attritees in each status group.)

TABLE 6.4

RATE OF ATTRITION FOR EACH OCCUPATIONAL CATEGORY

Occupation	Before Attrition*	Attritees
Student	150	91 (61%)
Homemaker	237	78 (33%)
Retired	37	11 (30%)
Part-time employed	67	34 (51%)
Full-time employed	19	9 (47%)

* Original number of recruited volunteers by occupational category. Some volunteers put themselves in more than one category when they registered for Upswing. Any attritees who did so are counted in all occupational categories they claimed.

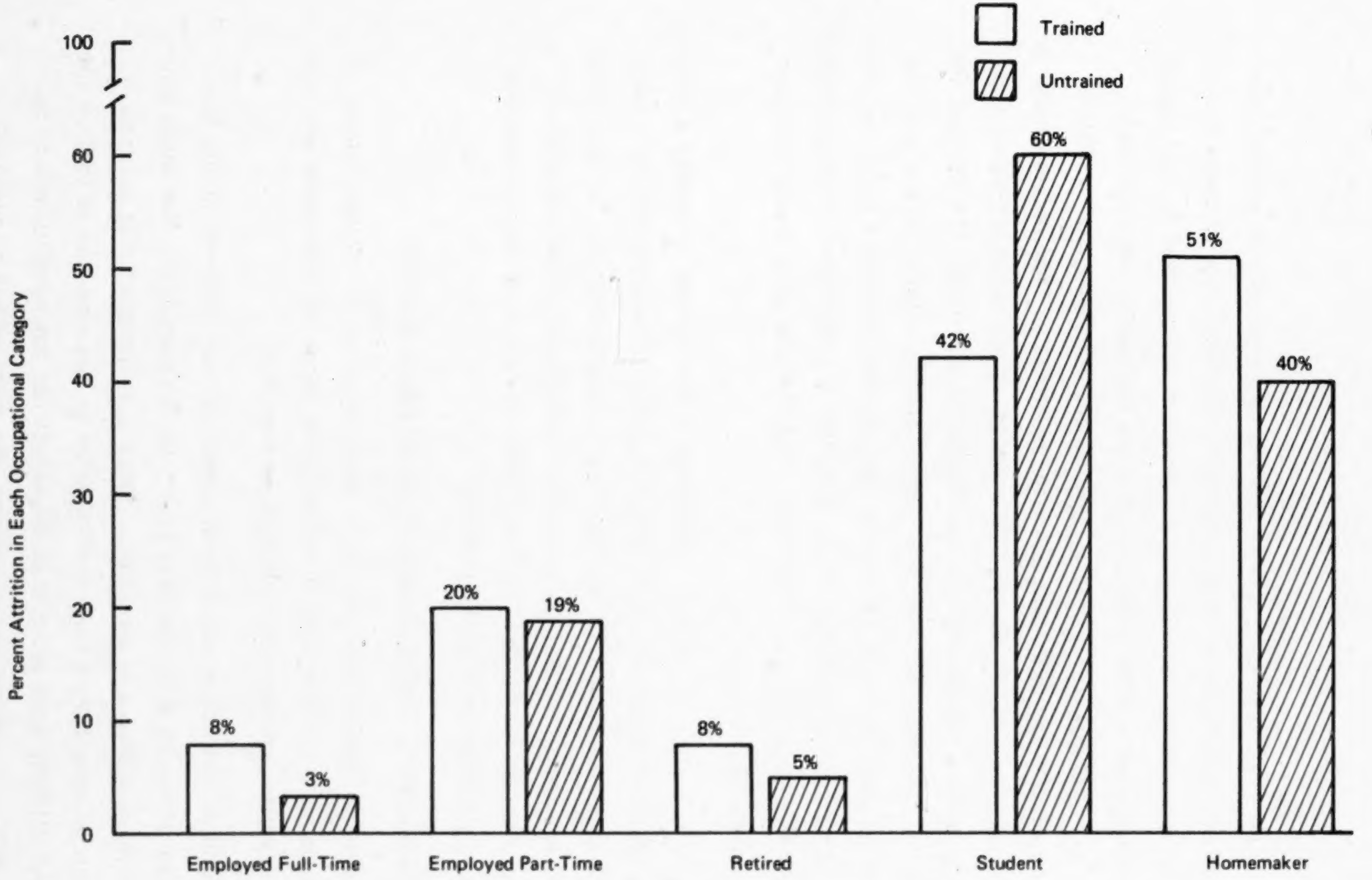


FIGURE 6.3. PERCENTAGE CONTRIBUTION TO TOTAL ATTRITION OF EACH OCCUPATIONAL CATEGORY
(Percentages based on total number of volunteers, by status group, originally in each category. Percentages do not add to 100% because volunteers may be in more than one occupational category.)

Volume I, Figure 3.7, page 3-19), it is evident that the rates of attrition for students and homemakers are not proportional to the incidence of these groups in the original population. Twenty-eight percent of the original trained population were students; 48% of the original untrained population were students (from Figure 3.7, Volume I.) However, trained and untrained student volunteers contributed 42% and 60%, respectively, to attrition. The reverse trend is shown for homemakers, who made up 65% and 51% of the original trained and untrained populations, respectively. Homemakers contributed 51% (T) and 40% (U) to attrition. The other occupational groups are represented in the attrition population to roughly the same extent that they were represented in the original population. The figure also clearly indicates that the difference between trained and untrained volunteer attrition (20% higher rate for the latter group) resulted from student attrition.

Table 6.5 shows a by-city breakdown of trained and untrained attritees in each occupational category. The important point to be made from this table is that the higher overall incidence of attrition among untrained volunteers can be attributed to higher attrition among untrained than among trained student volunteers in Denver and Oxford, although more untrained student volunteers dropped out in the other two cities as well.

Previous Training and Tutoring Experience of Volunteer Attritees

Previous training and experience were examined by training status of attritee. It was thought that lack of either might handicap volunteers who did not receive Upswing training more than those who did.

Previous training in child development did not keep volunteers from leaving the project. In fact, the data brings up the possibility that such training might have contributed to attrition. Figure 6.4 indicates that volunteers who had such training before their participation in Upswing tended to drop out of the project slightly more often than those who did not have it; 49% of the trained and 46% of the untrained volunteers who dropped had no previous

TABLE 6.5

OCCUPATION OF UPSWING DROPOUTS, BY CITY*

Occupational Category	Denver		Oxford		St. Louis		San Francisco		Total	
	T(N=24)	U(N=29)	T(N=17)	U(N=30)	T(N=14)	U(N=19)	T(N=19)	U(N=23)	T(N=74)	U(N=101)
Student	5 21%	18 62%	15 88%	26 87%	5 36%	7 37%	6 32%	10 43%	31 42%	60 60%
Homemaker	13 54%	13 45%	5 29%	5 35%	11 80%	13 68%	9 45%	9 39%	38 51%	40 40%
Retired	1 4%	1 3%	0 0%	0 0%	3 21%	1 5%	2 11%	3 13%	6 8%	5 5%
Part-time employed	6 25%	2 7%	4 24%	3 10%	2 14%	7 37%	3 16%	7 30%	15 20%	19 19%
Full-time employed	4 17%	1 3%	0 0%	0 0%	0 0%	0 0%	2 11%	2 7%	6 8%	3 3%

* Percentages based on total number (N) of attritees in each status group in city. Totals exceed actual number of volunteers who dropped out in each city because volunteers may be in more than one occupational category.

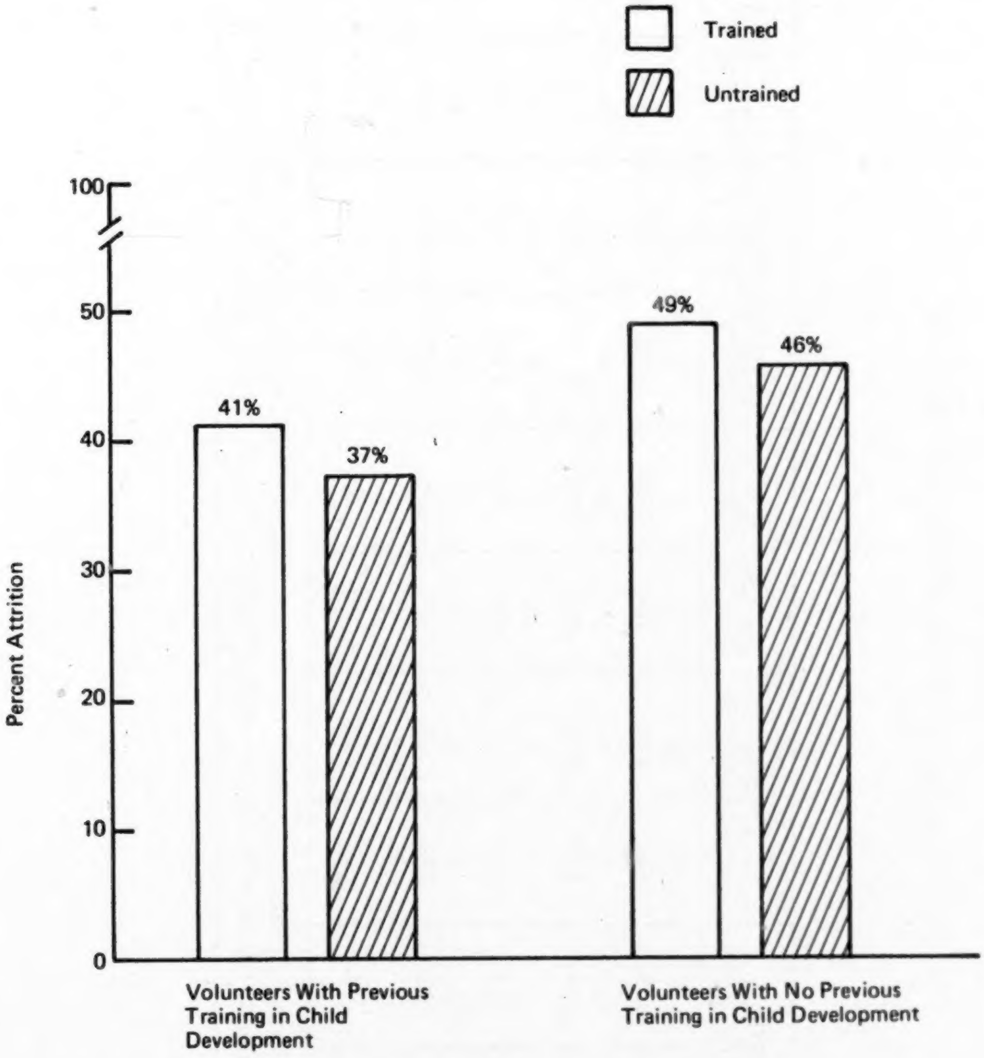


FIGURE 6.4. COMPARISON OF ATTRITION RATE OF TRAINED AND UNTRAINED VOLUNTEERS WHO HAD PREVIOUS TRAINING IN CHILD DEVELOPMENT WITH VOLUNTEERS WHO HAD NO PREVIOUS TRAINING, ALL CITIES

training, while 41% of the trained and 37% of the untrained did. Ten percent of the trained attritees and 17% of the untrained did not answer the question about previous training in child development on the registration form.

Comparing Figure 6.4 to Figure 3.9 in Volume I (page 3-26,) one sees that in terms of trained and untrained volunteers with and without previous training, the attrition group differed somewhat from the original population. However, there were proportionally more volunteers with previous training among attritees than in the original population and proportionally fewer volunteers with no previous training among attritees than in the original population. ORI believes that these findings are attributable to the number of college student attritees, many of whom were education majors and therefore had previous training in child development.

Neither do the data prove that previous relevant experience was important in keeping volunteers in the project. From Figure 6.5, about half of the untrained attritees had experience working with children with learning difficulties and half did not. Thirty-six percent of the trained volunteers lacked such experience. These percentages are almost identical to the percentages of inexperienced T and U volunteers who registered for Upswing, as given in Volume I, Figure 3.10 (page 3-27.) Comparison of the two illustrations shows, further, that the volunteers with each type of experience (former teacher aides, for example) were about equally represented in the original and the attrition populations.

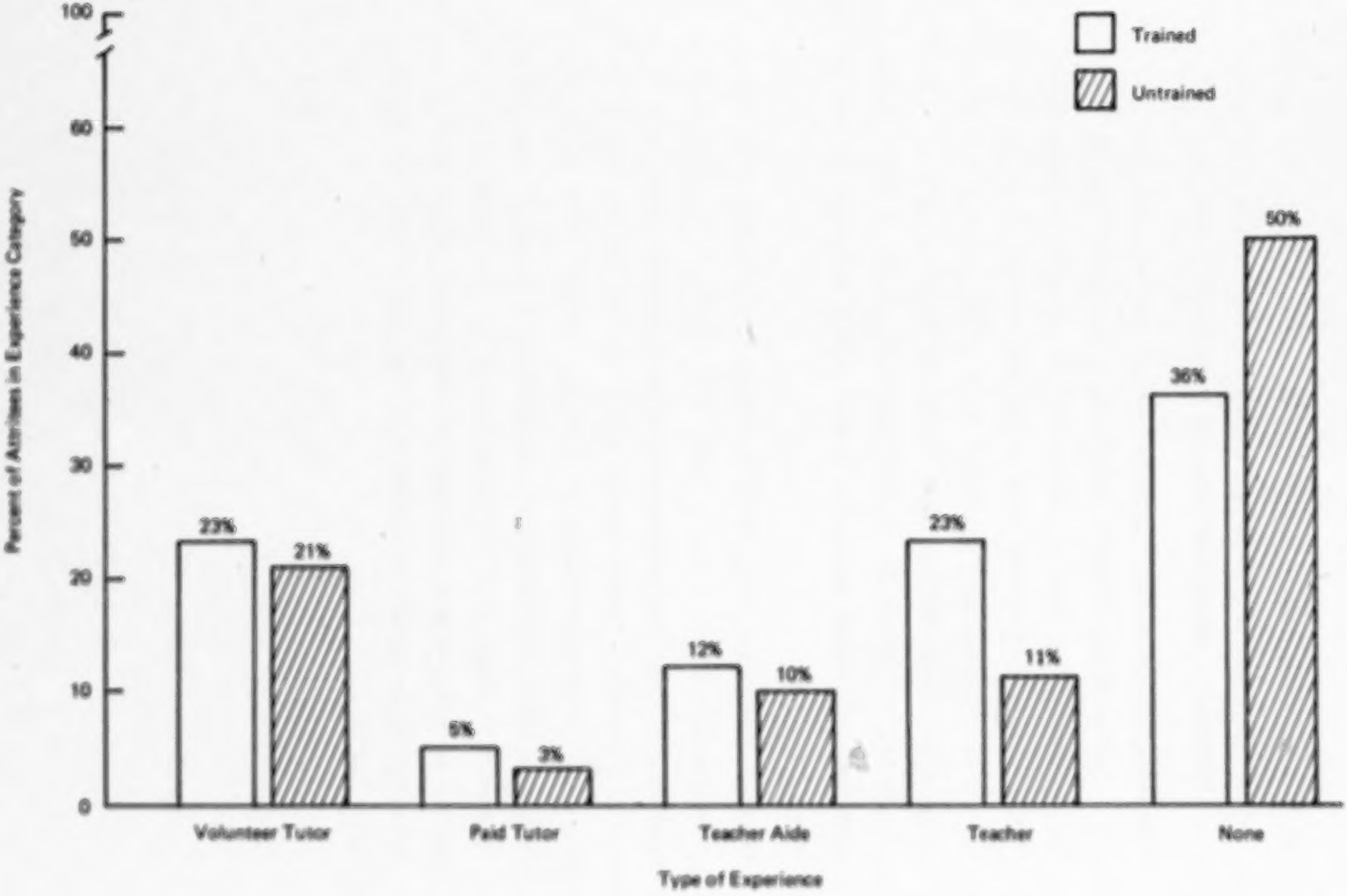


FIGURE 6.5. TRAINED AND UNTRAINED DROPOUTS' PREVIOUS TEACHING OR TUTORING EXPERIENCE, ALL CITIES
(Nonresponse rates: 1% trained, 5% untrained.)

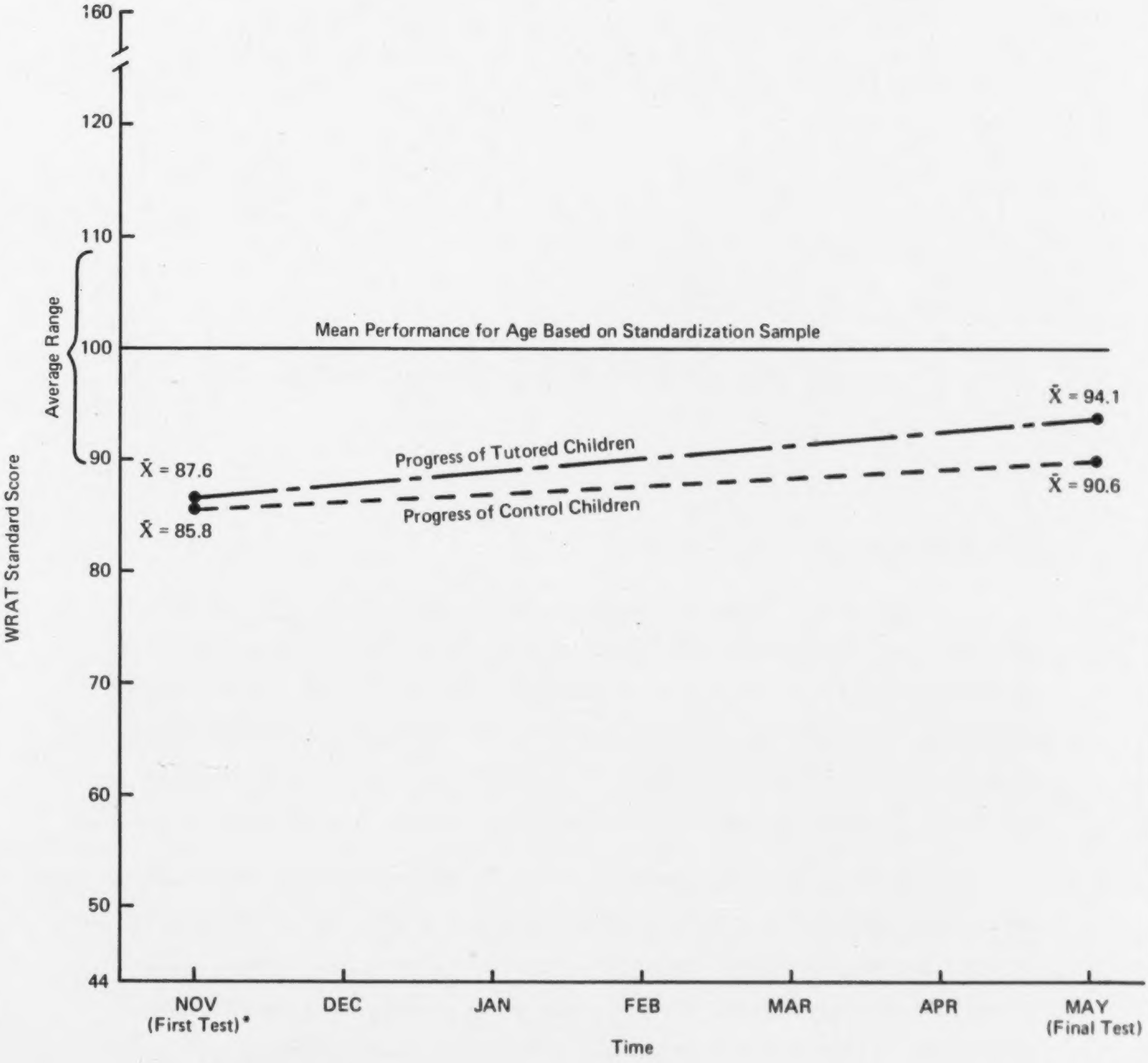
VII. CONCLUSIONS AND RECOMMENDATIONS

DID UPSWING TUTORING WORK?

ORI believes that the answer to this question is a definite but qualified yes. The tutored children, as a group, clearly made greater gains in reading than the control group according to the best objective measure of reading skills available, in ORI's opinion—the WRAT. Still the amount of difference was not radical. Figure 7.1 gives a view of the relative rates of progress in tested reading achievement of the tutored and untutored children.

Based on volunteer assessments, the tutored children made substantially greater improvement in oral language skills than in reading. Unfortunately we do not have an objective measure or comparison data on the control children. It would seem reasonable, however, that a one-to-one tutoring situation would offer a significant opportunity for improving such skills.

Volunteer and teacher assessments also pointed to a very high rate of self-esteem problems among tutored children. Their final judgments suggested that boosting children's self-esteem was an important contribution of tutoring.



*Testing continued through January in some cities; thus the mean starting point of both groups is inflated to the extent that classroom instruction and tutoring (for the experimental children) increased the scores of the children wh children who were tested late.

FIGURE 7.1. RATE OF PROGRESS IN READING AS MEASURED BY WRAT: TUTORED VERSUS CONTROL CHILDREN

None of the groups—neither of the tutored groups nor the control group—showed improved visual-motor integration skills on an objective test administered at the beginning and end of tutoring.

Unfortunately we could not gather comparison data on the control children for all of these variables. The data we do have, however, show that the tutored and control groups were quite homogeneous at the beginning of tutoring (in reading proficiency, visual-motor coordination, and IQ). Thus ORI would say that the Upswing children began the year with a cluster of difficulties related to potential reading difficulty and other problems in school: poor psychomotor control; underdeveloped oral language skills; and, especially, low self-esteem; although the IQ test showed that they had potential for at least average functioning.

It appears that because of their young age, this cluster of difficulties was not yet impinging on their reading skills to any great extent, since all group means were in the low-average range of performance. The noted problems did appear to impact teachers' (and volunteers) assessments of reading performance. It was interesting to find that even at the end of the year, the adult observers tended to rate the Upswing children's reading skills lower than did the objective test.

Tutoring was successful in helping children improve their reading skills to the moderate extent described in Figure 7.1. It was evidently even more successful in resolving or reducing some of the associated difficulties demonstrated by the children at the beginning of the year. One cannot know if the rates of progress suggested in Figure 7.1 will continue over future years. If so, the children tutored in the first year of Upswing would move farther and farther ahead of the control children, although at a slow rate. If the language and self-esteem difficulties discussed previously are as important as we believe they are, and if these difficulties are present and not moderated in the control children, their curve in the figure will sooner or later show a downward trend. In the second year of Upswing, ORI is "following" all of the children through their cumulative school records and end-of-year tests, to determine what changes occur in the hypothetical curves of Figure 7.1.

An extremely important finding of the first-year evaluation is that the kind of training given in the first year of Upswing did nothing to promote more effective tutoring. The training model was one of heavy preparation before tutoring began, with some inservice sessions after a few months with the children. This is a commonly used model. The data suggest that it is quite possible that training tutors is a waste, although it seems clear that some form of guidance and support over the tutoring period is essential. ORI would prefer to reserve judgment on the training question until the second-year project designs and training approaches can be evaluated.

The costs of the first year of Upswing were inflated by tasks required for the evaluation effort. Even so, the cost of an untrained volunteer was minimal, and very much lower than the cost of a trained volunteer. Yet trained and untrained evidently had the same impact on children. If this finding holds after the evaluation of the second year, one-to-one tutoring by volunteers would indeed be an inexpensive way of helping children who have learning difficulties.

Another finding that points to important cost savings is that it seems unnecessary to buy expensive materials for tutoring. The DISTAR and Peabody kits were far from fully utilized in the first year of Upswing. It appears that volunteers prefer to use a greater variety of more commonplace materials such as games and library books, art supplies, etc., many of which can be made by the volunteers or obtained in the schools (this also represents cost, of course, but not as great a cost as a supply of packaged instructional "programs").

ORI has already given most of its recommendations to USOE and the individual city directors. The program recommendations included, most importantly, that the training should be shifted to predominantly inservice format; that volunteers felt the need for more help with specific problem-solving and often did not find generalized training especially useful; that a greater variety of less expensive materials be suggested or supplied for the tutors.

As for the evaluation process, ORI has urged that a measure of self-esteem be included in the test battery and that all testing be completed earlier in the year, within a single month. The Metropolitan Achievement Test Series was found to be inappropriate for children with learning difficulties (and we believe for first-grade children in general) and has been dropped from the Upswing battery.

In the area of data collection, we would recommend that questionnaires not be used to collect information from parents in a study of this kind; family background data can be obtained from available tests, as is being done in the second year of the project. Although we got good response to teacher and volunteer questionnaires (with great effort), the interviews with volunteers, children, and teachers proved perhaps more valuable in helping the study team understand the dynamics of the project. ORI believes that such understanding is essential to intelligent evaluation and would encourage others to include interviewing among their data collection procedures. We found that people who resented questionnaires were quite forthright and willing to respond to an interviewer.

ORI also feels strongly that feedback based on the data gathered by an outside evaluator goes a long way in ensuring the acceptance of an evaluation effort. We recommend a relationship of open communication among all parties involved.

Appendix

Evaluation Questionnaires

PROJECT UPSWING VOLUNTEER REGISTRATION FORM

Name ______________________________
Please Print
Address ______________________________
______________________ Zip ________ Phone ________

University of Cincinnati
and
Cincinnati Public Schools

PROGRAM INFORMATION

1. Are you able to spend 1½ hours twice a week doing volunteer tutoring? .... 1. Yes ☐ 2. No ☐
2. Are you available to attend the 30-hour volunteer training course? .... 1. Yes ☐ 2. No ☐
3. Are you willing to remain with the project for one school year? .... 1. Yes ☐ 2. No ☐
4. Check the time periods in the school day when you would be available to tutor.

Time	M	T	W	T	F
Morning					
Afternoon					

CONFIDENTIAL INFORMATION FOR PROJECT UPSWING USE ONLY

Note: The information below is needed to benefit future Upswing projects. Individual names will not be used in tabulating results. Nevertheless, should you object to answering any particular item, please feel free to omit it.

AGE

Check one:
5. 1. Under 21 .... ☐
2. 21-25 .... ☐
3. 26-30 .... ☐
4. 31-40 .... ☐
5. 41-50 .... ☐
6. 51-60 .... ☐
7. Over 60 .... ☐

SEX

6. 1. Male .... ☐
2. Female .... ☐

MARITAL STATUS

7. 1. Single .... ☐
2. Married .... ☐
3. Separated .... ☐
4. Divorced .... ☐
5. Widowed .... ☐

OCCUPATIONAL INFORMATION

8. a. Are you retired? .... 1. Yes ☐ 2. No ☐
b. Are you a student? .... 1. Yes ☐ 2. No ☐
c. Are you a homemaker *(not employed full-time outside the home)*? .... 1. Yes ☐ 2. No ☐
9. a. Are you employed full-time? .... 1. Yes ☐ 2. No ☐
b. Are you employed part-time? .... 1. Yes ☐ 2. No ☐

10. If employed, please check your occupation from the list below.
1. **Clerical** *(secretary, typist, bookkeeper, sales clerk in retail store, etc.)* .... ☐
2. **Sales** *(insurance, real estate, merchandise sales except sales clerk in retail store, etc.)* .... ☐
3. **Service** *(babysitter, beautician, domestic, guard, bus driver, waitress, etc.)* .... ☐
4. **Skilled or structural** *(plumber, painter, textile, plasterer, mechanic etc.)* .... ☐
5. **Unskilled or semiskilled** *(factory assembly line, laborer, etc.)* .... ☐
6. **Professional, technical, managerial** *(writer, administrator, librarian, teacher, proprietor of retail establishment, etc.)* .... ☐
7. **Farming, fishery, forestry** .... ☐
8. Other occupation .... ☐

11. Please check the occupation of your spouse from list below.
(If not married check box 9)
1. **Clerical** *(secretary, typist, bookkeeper, sales clerk in retail store, etc.)* .... ☐
2. **Sales** *(insurance, real estate, merchandise sales except sales clerk in retail store, etc.)* .... ☐
3. **Service** *(babysitter, beautician, domestic, guard, bus driver, waitress, etc.)* .... ☐
4. **Skilled or structural** *(plumber, painter, textile, plasterer, mechanic, etc.)* .... ☐
5. **Unskilled or semiskilled** *(factory assembly line, laborer, etc.)* .... ☐
6. **Professional, technical, managerial** *(writer, administrator, librarian, teacher, proprietor of retail establishment, etc.)* .... ☐
7. **Farming, fishery, forestry** .... ☐
8. Other occupation (student, retired, etc.) .... ☐
9. Does not apply/Not Married .... ☐

NUMBER OF CHILDREN

12. How many children do you have?
a. Age 0-5 years .... ____
b. Age 6-10 years .... ____
c. Age 11-15 years .... ____
d. Age over 15 years .... ____
e. Total number of children .... ____

EDUCATION

13 a. Check the highest level of school you completed: *(Check one)*
1. 8th grade or less .... ☐
2. 9th - 10th grade .... ☐
3. 11th - 12th but not graduated .... ☐
4. High school graduate .... ☐
5. 1 - 2 years of college .... ☐
6. 3 - 4 years of college but not graduated .... ☐
7. College graduate *(e.g., B.A., B.S.)* .... ☐
8. Attended graduate school .... ☐
9. Earned advanced degree *(e.g., M.A., Ph. D.)* .... ☐

13 b. If you attended college, what was your area of concentration?
____

14. Check the highest level of school completed by your spouse:
(If not married check box 0)
1. 8th grade or less .... ☐
2. 9th - 10th grade .... ☐
3. 11th - 12th but not graduated .... ☐
4. High school graduate .... ☐
5. 1 - 2 years of college .... ☐
6. 3 - 4 years of college but not graduated .... ☐
7. College graduate *(e.g., B.A., B.S.)* .... ☐
8. Attended graduate school .... ☐
9. Earned advanced degree *(e.g., M.A., Ph. D.)* .... ☐
0. Does not apply/Not married .... ☐

INCOME

15. Please put a check mark beside the closest estimate of your family's annual income:
1. $ 1,499 or below .... ☐
2. $ 1,500 – 2,999 .... ☐
3. $ 3,000 – 4,999 .... ☐
4. $ 5,000 – 6,999 .... ☐
5. $ 7,000 – 9,999 .... ☐
6. $ 10,000 – 12,999 .... ☐
7. $ 13,000 – 17,999 .... ☐
8. $ 18,000 – 24,999 .... ☐
9. $ 25,000 and above .... ☐

VOLUNTEER EXPERIENCE

16. Have you had any previous tutoring/teaching experience?
(Check all that apply)
1. No .... ☐
2. Yes, I have been a volunteer tutor .... ☐
3. Yes, I have been a paid tutor .... ☐
4. Yes, I have been a teacher aide .... ☐
5. Yes, I have been a teacher .... ☐

17. Have you had any formal training in child development? .... 1. Yes ☐ 2. No ☐

18. Do you have any knowledge of, or experience with, children with special problems *(e.g., learning problems, physical or mental handicaps, etc.)*?
(Check all that apply)
1. No .... ☐
2. Yes, I have h[illegible] no formal training in the area of ____________
____________ ______________________
3. Yes, I have a child with learning problems in my family .... ☐
4. Yes, friends have a child with learning problems .... ☐
5. Yes, I have worked with children with learning problems .... ☐
6. Yes, I have worked with children with other types of mental or physical impairments *(e.g., handicapped, retarded, etc.)* .... ☐

PROJECT
UPSWING
TEACHER
REGISTRATION FORM

Name ____________________

School ____________________

City ______________ State ______________ Zip ______________

University of Cincinnati
and
Cincinnatti Public Schools

CONFIDENTIAL INFORMATION FOR PROJECT UPSWING USE ONLY

Note: The information below is needed to benefit future Upswing projects. Individual names will not be used in tabulating results. Nevertheless, should you object to answering any particular item, please feel free to omit it.

AGE

Check one:

1. 1. Under 21 .... ☐
   2. 21 - 25 .... ☐
   3. 26 - 30 .... ☐
   4. 31 - 40 .... ☐
   5. 41 - 50 .... ☐
   6. 51 - 60 .... ☐
   7. Over 60 .... ☐

DEGREE

Check all degrees earned:

2. 1. B.A., B.S. .... ☐
   2. M.A., M.S. .... ☐
   3. M.A.T. .... ☐
   4. Other *(specify)* ______________ .. ☐
   5. None .... ☐

EXPERIENCE

3. **How many years have you taught prior to this year ?**

____

How many years have you taught first grade prior to this year ?

____

4. **Have you ever had a volunteer or teacher aide assigned to your classroom before ?** .... **1. Yes** ☐ **2. No** ☐

EDUCATION

5. a. **Have you had any special course work in education of children with learning problems?**

1. Yes *(answer parts b and c)* .... ☐
2. No .... ☐

b. **If yes, please check level(s) of courses you have had.**

Level(s) *(check all that apply)*

1. Undergraduate .... ☐
2. Graduate .... ☐
3. Other (e.g., workshop, etc.) .... ☐

c. **Check the total number of graduate and/or undergraduate credit hours you have received in education of children with learning problems.**

Total Credit Hours

1. 0 credit hours (non-credit courses) .... ☐
2. 1 - 3 hours .... ☐
3. 4 - 6 hours .... ☐
4. 7 - 10 hours .... ☐
5. 11 - 15 hours .... ☐
6 Over 15 hours .... ☐

PROJECT UPSWING

PARENT REGISTRATION FORM

Name ______________________________

Address ______________________________

______________________ **Zip** ________ **Phone** ________

San Francisco Unified School District
in Cooperation with
San Francisco State College

CONFIDENTIAL INFORMATION FOR PROJECT UPSWING USE ONLY

Note: The information below is needed to benefit future Upswing projects, Individual names will not be used in tabulating results. Nevertheless, should you object to answering any particular item, please feel free to omit it.

CHILD INFORMATION

1. Child's Name ______________________________
2. Teacher ______________________________
3. School ______________________________
4. Birthdate ______________________________ Boy ☐ Girl ☐
5. Attended kindergarten? .... 1. Yes ☐ 2. No ☐
6. Attended nursery school?.. 1. Yes ☐ 2. No ☐

7. Which of the following would best describe your child's attitude toward school in the first grade?
- 1. Enthusiastic .... ☐
- 2. Favorable .... ☐
- 3. Indifferent .... ☐
- 4. Slightly negative .... ☐
- 5. Completely negative – does not want to attend .... ☐
- 0. Don't know .... ☐

8. Does he/she like to participate in group activities at school? .... 1. Yes ☐ 2. No ☐ 3. Don't know ☐

9. Does he/she get along well with other children in his/her age group? *(Check one)*
- 1. Almost always .... ☐
- 2. Usually .... ☐
- 3. Only sometimes .... ☐
- 4. Not often .... ☐
- 5. Hardly ever .... ☐
- 0. Don't know .... ☐

10. Does he/she have regular playmates in the neighborhood in his/her own age group?
- 1. No .... ☐
- 2. Only one .... ☐
- 3. Two .... ☐
- 4. A small group of friends .... ☐
- 5. Many .... ☐
- 6. No other children nearby .... ☐
- 0. Don't know .... ☐

FAMILY INFORMATION

11. How many children do you have?
- a. Age 0-5 years .... ____
- b. Age 6-10 years .... ____
- c. Age 11-15 years .... ____
- d. Age over 15 years .... ____
- e. **Total number of children** .... ____

12. What is the total number of adults living in the home? (include parents, children 21 and over, grandparents, boarders, friends, etc.) .... **Total** ..... ____

13. Marital Status of child's parents: *(check one)*
- 1. Single .... ☐
- 2. Married .... ☐
- 3. Separated .... ☐
- 4. Divorced .... ☐
- 5. Widowed .... ☐

14.a. Is any language other than English spoken in the home? .... 1. Yes ☐ 2. No ☐

b. If yes, what language is it? ....

____

FAMILY INFORMATION

15. What is your relationship to the child?
- 1. Mother .... ☐
- 2. Father .... ☐
- 3. Step-mother .... ☐
- 4. Step-father .... ☐
- 5. Grandmother .... ☐
- 6. Grandfather .... ☐
- 7. Aunt/Uncle .... ☐
- 8. Other relative .... ☐
- 9. Legal guardian .... ☐
- 0. Other .... ☐

16. Check highest education level reached by child's father or male guardian:
- 1. 8th grade or less .... ☐
- 2. 9th-10th grade .... ☐
- 3. 11th-12th grade but not graduated .... ☐
- 4. High school graduate .... ☐
- 5. 1-2 years of college .... ☐
- 6. 3-4 years of college but not graduated .... ☐
- 7. College graduate (e.g., B.A., B.S.) .... ☐
- 8. Attended graduate school .... ☐
- 9. Advanced degree (e.g., M.A., PhD., etc.) .... ☐
- 0. Don't know .... ☐

17. Check highest education level reached by child's mother or female guardian:
- 1. 8th grade or less .... ☐
- 2. 9th-10th grade .... ☐
- 3. 11th-12th grade but not graduated .... ☐
- 4. High school graduate .... ☐
- 5. 1-2 years college .... ☐
- 6. 3-4 years of college but not graduated .... ☐
- 7. College graduate (e.g., B.A., B.S.) .... ☐
- 8. Attended graduate school .... ☐
- 9. Advanced degree (e.g., M.A., PhD., etc.) .... ☐
- 0. Don't know .... ☐

INCOME

18. Please check box beside closest estimate of your annual family income:
- 1. $ 1,499 or below .... ☐
- 2. $ 1,500 – 2,999 .... ☐
- 3. $ 3,000 – 4,999 .... ☐
- 4. $ 5,000 – 6,999 .... ☐
- 5. $ 7,000 – 9,999 .... ☐
- 6. $ 10,000 – 12,999 .... ☐
- 7. $ 13,000 – 17,999 .... ☐
- 8. $ 18,000 – 24,999 .... ☐
- 9. $ 25,000 and above .... ☐

PROGRAM INFORMATION

19. Will you approve the individual testing required by Project Upswing so that the teacher may plan practice work tailored to the needs of your child? .... 1. Yes ☐ 2. No ☐

20. Are you willing to attend occasional meetings with your child's teacher and/or volunteer during the course of the school year? .... 1. Yes ☐ 2. No ☐

21. Further comments about your child or the volunteer program:

____

____

____

____

____

____

____

____

____

PROJECT UPSWING

VOLUNTEER FIRST IMPRESSIONS

OMB No.: 51–S–7/049

Expiration Date: 6/30/72

NAME: ______________________________

CHILD'S NAME: ______________________________

SCHOOL ____________________ CITY ____________ ZIP ________

Instructions: For each item below, check the box after the phrase or statement which comes closest to your own opinion or experience as a volunteer. Please *CHECK* only *ONE* box per question. Space is provided for comments on most questions.

CONFIDENTIAL INFORMATION FOR PROJECT UPSWING USE ONLY

Please do not consult with other volunteers when answering these questions. Your frank opinions are needed and your responses will be kept in complete confidence. No names will be used when responses are tabulated.

1. My first impression is that Project Upswing will: *(check one)*
- a. Be beneficial to most of the children participating .... ☐
- b. Be beneficial to some of the children participating .... ☐
- c. Not be beneficial to any of the children participating .... ☐

2. My first impression is that Project Upswing will probably: *(check one)*
- a. Produce major improvements in the progress made by my pupil .... ☐
- b. Produce limited improvements in the progress made by my pupil .... ☐
- c. Have no effect on the progress made by my pupil .... ☐
- d. Interfere with the progress normally made by my pupil .... ☐

Comments: ______________________________

____

____

____

____

3. I feel that the training or orientation given to me as a volunteer is: *(check one)*
- a. Excellent .... ☐
- b. Adequate .... ☐
- c. Inadequate .... ☐

Comments: ______________________________

____

____

____

____

4. I feel that: *(check one)*
- a. I have more training than I need in the methods and materials I must use as a tutor .... ☐
- b. I am adequately prepared to use the methods and materials available for tutoring .... ☐
- c. I need more training in the methods and materials I must use as a tutor .... ☐

Comments: ______________________________

____

____

____

____

5. I feel that the teaching methods and materials I use as a volunteer will be: *(check one)*
- a. Highly effective .... ☐
- b. Effective .... ☐
- c. Ineffective .... ☐

Comments: ______________________________

____

____

____

6. Check one:
- a. I have done extensive outside reading about children with learning problems since joining Project Upswing.............. ☐
- b. I have done a little outside reading about children with learning problems since joining Project Upswing.............. ☐
- c. I have not had a chance to do any outside reading about children with learning problems since joining Project Upswing....... ☐
- d. I have not desired to do any outside reading about children with learning problems since joining Project Upswing....... ☐

Comments: ______________________________

____

____

____

7. **I feel that preparing for tutoring sessions is:** *(check one)*
   - a. A useful and interesting part of volunteering ☐
   - b. Necessary but tedious work ☐
   - c. Time-consuming and unnecessary ☐

Comments: ____________________

8. **I find the task of tutoring my pupils is:**
   - a. More difficult than I had expected ☐
   - b. As challenging as I had expected ☐
   - c. Easier than I had expected ☐

Comments: ____________________

9. **My pupil's first response to me was:**
   - a. Willing cooperation ☐
   - b. Hesitant cooperation ☐
   - c. Neutral ☐
   - d. Confused ☐
   - e. Hostile ☐

Comments: ____________________

10. **I feel that the teacher:** *(check one)*
    - a. Welcomes my assistance ☐
    - b. Is neutral about my assistance ☐
    - c. Resents my assistance ☐
    - d. I don't know how the teacher feels about my assistance ☐

Comments: ____________________

11. **Check one:**
    - a. I would prefer more guidance from the teacher ☐
    - b. The teacher I work with gives me adequate guidance ☐
    - c. I would prefer less guidance from the teacher ☐
    - d. I do not need any assistance from the teacher ☐

Comments: ____________________

12. **Check one:**
    - a. I am satisfied with my role as an Upswing volunteer ☐
    - b. I am satisfied with certain aspects of Project Upswing, but dissatisfied with others ☐
    - c. I regret having committed myself to Project Upswing ☐

Comments: ____________________

13. **In this space please note any problems you have encountered or write any comments you have that may be useful to future Upswing programs.**

Comments: ____________________

PROJECT UPSWING

TEACHER FIRST IMPRESSIONS

OMB No.: 51–S–7/049

Expiration Date: 6/30/72

NAME: ____________________

SCHOOL: ____________________

CITY: ____________________ ZIP: __________

Instructions: This questionnaire has been prepared to find out what feelings you have about the special attention your students are receiving in Project Upswing. Please select the answer that most reflects your feelings and place a check mark in the box after your answer. Space is provided for comments on most questions.

CONFIDENTIAL INFORMATION FOR PROJECT UPSWING USE ONLY

Please do not consult with other teachers when answering these questions. Your frank opinions are needed and your responses will be kept in complete confidence. No names will be used when responses are tabulated.

1. My first impression is that Project Upswing will: *(check one)*
- a. Be beneficial to most of the children participating .... ☐
- b. Be beneficial to some of the children participating .... ☐
- c. Not be beneficial to any of the children participating .... ☐

Comments: ____________________

2. The training given to volunteers seems to have been: *(check one)*
- a. Excellent .... ☐
- b. Adequate .... ☐
- c. Inadequate .... ☐
- d. I have no knowledge of the training given to volunteers.................................. ☐

Comments: ____________________

3. I feel that: *(check one)*
- a. Most teachers prefer to handle their students alone .... ☐
- b. Most teachers welcome volunteer aides.................................. ☐

Comments: ____________________

4. Parents of children in the Upswing Program: *(check one)*
- a. Should often help their children with school work at home .... ☐
- b. Should not help their children with school work at home .... ☐
- c. Should occasionally help their children with school work at home .... ☐

Comments: ____________________

5. Check one:
- a. I would like to have Upswing volunteers working with my class next year .... ☐
- b. I would prefer not to have Upswing volunteers working with my class next year .... ☐
- c. I am undecided about having Upswing volunteers in my class next year .... ☐

Comments: ____________________

6. In the space below please indicate all the regular class activities each Upswing pupil misses during his tutoring sessions with his volunteer (e.g., reading, recess, art, etc.).

Child's Name	Class Activities Missed
1.	
2.	
3.	
4.	
5.	

7. Please indicate any changes you have noticed in the reading and general behavior of the Upswing pupils since they began working with the tutors.

Child's Name	Reading Ability	Behavior/Attitude Toward School
1.	Improved ☐ Remained the same ☐ Declined ☐	Improved ☐ Remained the same ☐ Declined ☐
2.	Improved ☐ Remained the same ☐ Declined ☐	Improved ☐ Remained the same ☐ Declined ☐
3.	Improved ☐ Remained the same ☐ Declined ☐	Improved ☐ Remained the same ☐ Declined ☐
4.	Improved ☐ Remained the same ☐ Declined ☐	Improved ☐ Remained the same ☐ Declined ☐
5.	Improved ☐ Remained the same ☐ Declined ☐	Improved ☐ Remained the same ☐ Declined ☐

8. How do you think the Upswing children feel about their volunteer? *(check one)*

Child's Name	Likes Volunteer	Seems Neutral About Volunteer	Does Not Like Volunteer	Don't Know How Child Feels About Volunteer
1.	☐	☐	☐	☐
2.	☐	☐	☐	☐
3.	☐	☐	☐	☐
4.	☐	☐	☐	☐
5.	☐	☐	☐	☐

9. In this space please note any problems you may have encountered regarding Project Upswing or write any comments you have that might be useful to future Upswing programs.

PROJECT UPSWING

PARENT FIRST IMPRESSIONS

OMB No. : 51–S–71049

Expiration Date: 6/30/72

PARENT'S NAME: ______________________________

CHILD'S NAME ______________________________

SCHOOL ____________________ **CITY** ____________ **ZIP** ________

Instructions: This questionnaire has been prepared to find out what feelings you have about the special attention your child is receiving in Project Upswing. Please select the answer that most reflects your feelings and place a check mark in the box after your answer. Space is provided for comments on most questions.

CONFIDENTIAL INFORMATION FOR PROJECT UPSWING USE ONLY

Please do not consult with other parents when answering these questions. Your frank opinions are needed and your responses will be kept in complete confidence. No names will be used when responses are tabulated.

1. Your relationship to the child is:

- a. Mother .... ☐
- b. Father .... ☐
- c. Stepparent .... ☐
- d. Foster parent .... ☐
- e. Guardian .... ☐
- f. Other *(specify)* .... ☐

____

2a. Were you able to attend the Project Upswing parent orientation session?

Yes ..... (Answer 2b)

No ..... (Skip to question 3)

2b. Did you feel that the orientation session given to the parents was:

- **a. Excellent** .... ☐
- **b. Adequate** .... ☐
- **c. Inadequate** .... ☐

Comments: ______________________________

3. Check one:

- a. I feel that Project Upswing probably will benefit my child .... ☐
- b. I feel that Project Upswing probably will not benefit my child .... ☐
- c. I have no idea what effect Project Upswing will have on my child .... ☐

Comments: ______________________________

4. How did you feel about Project Upswing selecting your child for special attention? *(check one)*

- a. I am pleased to have my child involved in Project Upswing .... ☐
- b. I have no opinion about my child's participation in Project Upswing .... ☐
- c. I am not pleased that my child is participating in Project Upswing .... ☐

Comments: ______________________________

5. Please indicate whether you agree or disagree with each of the following statements by placing a check in the appropriate box.

a. The only person who should teach my child to read is the teacher

- Agree .... ☐
- Disagree .... ☐

b. It is better for parents not to discuss classwork with the child who is having difficulty with school work

- Agree .... ☐
- Disagree .... ☐

c. Parents whose children are having difficulty with first grade work should work with them regularly at home

- Agree .... ☐
- Disagree .... ☐

Comments: ______________________________

6. How do you think your child feels about receiving volunteer assistance under Project Upswing? *(check one)*

a. He seems to enjoy the special attention ☐
b. He seems indifferent ☐
c. He seems unhappy or disturbed by the special attention ☐
d. He has not expressed his feelings about it ☐

Comments: ____________________

7. How do you think your child feels about his volunteer? *(check one)*

a. He likes his volunteer ☐
b. He does not like his volunteer ☐
c. I do not know how he feels about his volunteer ☐

Comments: ____________________

8. Which of the following would best describe your child's attitude toward school since he began working with his Project Upswing volunteer? *(check one)*

a. Enthusiastic ☐
b. Favorable ☐
c. Indifferent ☐
d. Slightly negative ☐
e. Completely negative ☐
f. I don't know ☐

Comments: ____________________

9. In this space please note any problems you may have encountered regarding Project Upswing or write any comments you have that might be useful to future Upswing programs.

____

PROJECT UPSWING

FINAL PROGRESS REPORT FROM VOLUNTEER

OMB No.: 51-S-72024
Expiration Date:6/30/72

Volunteer's Name: ______________________

Child's Name: ______________________

School: ______________________ **City:** ______________________

CONFIDENTIAL INFORMATION FOR PROJECT UPSWING USE ONLY

Please do not consult with other volunteers when answering these questions. Your frank opinions are needed. No names will be used when responses are tabulated. If there is any question you would rather not answer, feel free to skip it. However please make every effort to answer as many questions as possible.

1. **In your opinion, what overall impact has Project Upswing had on the progress of the child you tutor?** *(check one)*
   - a. I feel that Upswing has resulted in major improvements in the progress of my pupil . . ☐
   - b. I feel that Upswing has resulted in limited improvements in the progress of my pupil . . ☐
   - c. I feel that Upswing has had no effect on the progress of my pupil . . . . ☐
   - d. I don't know . . . . ☐

Comments: ______________________

____

____

2. **What is the child's usual response to tutoring activities?** *(check one)*
   - a. Negative . . . . ☐
   - b. Neutral . . . . ☐
   - c. Eager . . . . ☐

Comments: ______________________

____

____

3. **Which best describes the child's usual response to you at the beginning of tutoring and now?** *(please check one for each time period)*

	At the Beginning	Now
a. Willing cooperation	☐	☐
b. Hesitant cooperation	☐	☐
c. Neutral	☐	☐
d. Confused	☐	☐
e. Hostile	☐	☐

Comments: ______________________

____

____

4. **How does the child seem to feel about missing class activities for the tutoring session?** *(check one)*
   - a. Considers it a special treat . . . . ☐
   - b. Willing but not enthusiastic . . . . ☐
   - c. Reluctant to miss class activities . . . . ☐
   - d. Embarassed to be singled out . . . . ☐
   - e. I don't know . . . . ☐

Comments: ______________________

____

____

5. **Consider all the time you have spent tutoring the child as 100%. Please estimate how much time you and the child have spent on each of the following activities since tutoring began.** *(write in the approximate percentage of time spent on each activity. If you have not spent any time on a certain activity, please write in "0." Remember, total time = 100%.)*

Activity	Percent of Time Spent
a. DISTAR	[ ] %
b. Peabody	[ ] %
c. Writing/telling stories	[ ] %
d. Unstructured verbal expression *(taking walks around school, school yard, etc.)*	[ ] %
e. Practice on classwork in reading *(reader, reading workbook, etc.)*	[ ] %
f. Practice on other skills or class assignments suggested by the teacher	[ ] %
g. Word/alphabet drill *(e.g., using flash cards, word strips, felt board, blocks, tracing and other types of word/letter learning by touch)*	[ ] %
h. Games	[ ] %
i. Library books	[ ] %
j. Motor activities *(physical exercise)*	[ ] %
k. Other *(please specify)*	
______________________	
______________________	
______________________	
______________________	
______________________	[ ] %
Total	100%

6. **Have you noticed any change in the child's confidence and/or self esteem since tutoring began?** *(check one)*
   - a. Child seems to have made major gains in confidence/self esteem . . . . ☐
   - b. Child seems to have made moderate gains in confidence/self esteem . . . . ☐
   - c. Child seems to have remained at about his initial level of confidence/self esteem, but this never appeared to be a problem area for him . . . . . ☐
   - d. Child seems to have remained at about his initial level, but needs greater confidence/self esteem ☐
   - e. Child seems to have lost some confidence/self esteem . . . . ☐

Comments: ______________________

____

____

7. Have you noticed any change in the child's willingness to express himself orally? *(check one)*

a. Yes, there has been a major improvement . . [ ]
b. Yes, there has been moderate improvement . [ ]
c. No, he has expressed himself freely throughout tutoring . . . . [ ]
d. No, I have not noticed any change, but I feel there is a need for growth in this area . . . . . [ ]
e. Yes, the child seems to have withdrawn . . . . [ ]

Comments: ____________________

8. Have you noticed any change in the child's ability to pay attention since tutoring began? *(check one)*

a. The child's ability to pay attention has decreased . . . . [ ]
b. I have not noticed any change, but I feel improvement is needed . . . . [ ]
c. Poor attention was never a problem for this child . . . . [ ]
d. The child has made moderate gains in ability to pay attention . . . . [ ]
e. The child has made major gains in ability to pay attention . . . . [ ]

Comments: ____________________

9. Have you noticed any change in hyperactive behavior since tutoring began? *(check one)*

a. Hyperactivity has increased . . . . [ ]
b. I have not noticed any change , but I feel improvement is needed . . . . [ ]
c. The child was never hyperactive . . . . [ ]
d. The child is somewhat less hyperactive . . . . [ ]
e. The child is considerably less hyperactive . . [ ]

Comments: ____________________

10. Has there been a language barrier between you and the child? *(if yes, please briefly describe in comments space)*

a. Yes . . . . [ ]
b. No . . . . [ ]

Comments: ____________________

11. On the rating scale below, show any changes you have observed in the child's reading and language performance. *(please circle one rating for each skill area)*

RATING SCALE

NA	–	**Not applicable to child at this stage of development; we have not worked on it**
–1	–	**Child's level of skill in this area seems lower than it was in November**
0	–	**No change observed**
+1	–	**Some improvement observed**
+2	–	**Major improvement observed**

Skill Area	*Not Applicable*	*Lower*	*No Change*	*Some Improvement*	*Major Improvement*
a. Speaking vocabulary	NA	–1	0	+1	+2
b. Ability to express ideas clearly	NA	–1	0	+1	+2
c. Understanding through listening (understands directions, meanings of stories read to him, etc.)	NA	–1	0	+1	+2
d. Ability to sound out new words	NA	–1	0	+1	+2
e. Understanding what he reads	NA	–1	0	+1	+2
f. Reading with expression	NA	–1	0	+1	+2

12. Where do you usually tutor the child *(for example, empty classroom, cafeteria, hall)?*

____

13. Do you feel that the tutoring environment is adequate *(i.e., well lighted, comfortable, quiet, etc.)?*

a. Yes . . . . [ ]
b. No . . . . [ ]

If no, list problems: ____________________

14. In your opinion, how much time should Upswing volunteers spend tutoring their pupils? *(your answer will help us in planning next year's program)* _____ hours/week.

Comments: ____________________

15. Please estimate the average amount of time you spend preparing for a tutoring session. *(check one)*

- a. I do not have the time for special preparation ☐
- b. I feel that special preparation is unnecessary ☐
- c. 15–30 minutes per session .... ☐
- d. 30 minutes–1 hour per session .... ☐
- e. 1–2 hours per session .... ☐
- f. More than 2 hours per session .... ☐

Comments: ______________________

____

____

16. How often are tutoring materials available to you at the school when you need them? *(please check one)*

- a. Always .... ☐
- b. Usually .... ☐
- c. Sometimes .... ☐
- d. Rarely .... ☐
- e. Never .... ☐

Comments: *(please note if there has been a change in the availability of materials)*

____

____

____

____

____

17. I feel that the teaching methods and materials I use as a volunteer have been:

- a. Highly effective .... ☐
- b. Effective .... ☐
- c. Ineffective .... ☐

Comments: ______________________

____

____

____

18. Who has been your primary source of guidance and assistance during the year? *(check one)*

- a. Teacher .... ☐
- b. Upswing staff .... ☐
- c. Other volunteer(s) .... ☐
- d. Other *(please specify)* .... ☐

Comments: ______________________

____

____

____

19. Do you feel you have received enough guidance and assistance during the year *(for example, help in planning tutoring sessions, in getting materials, in specific problem-solving, etc.)?* *(check one)*

- a. Yes .... ☐
- b. No .... ☐

Comments: ______________________

____

____

20. What kind(s) of guidance-assistance do you think the Project Upswing staff from the university should give (regardless of whether it has been given this year)?

____

____

____

____

____

____

____

____

21. Did you receive any guidance from the child's teacher?

- a. Yes .... ☐
- b. No .... ☐

22. How do you feel about teacher guidance? *(check one)*

- a. I would have preferred more teacher guidance from the teacher .... ☐
- b. The teacher I work with has given me adequate guidance .... ☐
- c. I would have preferred less guidance from the teacher .... ☐
- d. I do not need any guidance from the teacher ☐

Comments: ______________________

____

____

23. Please indicate what kinds of guidance-assistance you would prefer to get from the teacher. *(Rank the choices from 1 to 6; 1 = most important to you, 6 = least important to you.)*

- a. Discussions with teacher about child's progress and problem areas .... ☐
- b. Discussions with teacher to coordinate activities ☐
- c. Teacher suggestions about tutoring materials to use .... ☐
- d. Teacher help in locating tutoring materials . ☐
- e. Regular teacher guidance in planning for tutoring sessions .... ☐
- f. Regular assignment of tutoring activities by teacher .... ☐

24. Are there any additional kinds of teacher aid which should receive a high priority? *(specify)*

____

____

____

____

____

____

____

____

____

25. How does the child's teacher seem to feel about your assistance? *(check one)*

- a. I feel that the teacher has welcomed my assistance .... [ ]
- b. I feel that the teacher has been neutral about my assistance .... [ ]
- c. I feel that the teacher has resented my assistance .... [ ]
- d. I don't know how the teacher has felt about my assistance .... [ ]

Comments: ______________________________

____

____

26. Please rank the importance of the following in helping you to be an effective Upswing tutor. *(Rank from 1 to 5 in space provided; 1 - most important; 5 - least important.)*

- a. Day-to-day experience with child .... [ ]
- b. A close working relationship with the child's teacher .... [ ]
- c. Training in techniques and materials for tutoring .... [ ]
- d. Experience working with children in age group [ ]
- e. Previous tutoring experience .... [ ]

27. Please specify any other factors that you feel are important aids to effective tutoring:

____

____

____

____

____

____

28. Please indicate your feelings about each of the following aspects (a. – j.) of Project Upswing, using the scale below.

SD	D	O	S	SS
Strongly Dissatisfied	Dissatisfied	Neutral	Satisfied	Strongly Satisfied

Then rank the importance of each item from 1 to 10 in terms of its impact on your satisfaction with Upswing *(1 = most important, 10 = least important).*

	Circle Attitude Rating	Rank Importance
a. Upswing's overall approach to working with children who have minimal learning difficulties	SD D O S SS	___
b. The research questionnaires	SD D O S SS	___
c. The preparation for tutoring given by Upswing	SD D O S SS	___
d. The assistance given to you during the year	SD D O S SS	___
e. Overall project communications	SD D O S SS	___
f. Working with the children	SD D O S SS	___
g. Working within the school system	SD D O S SS	___
h. The knowledge you have gained in your Upswing experience	SD D O S SS	___
i. Personal recognition for your contributions of time and effort	SD D O S SS	___
j. Upswing as an opportunity for community service	SD D O S SS	___

29. Has Project Upswing generally met your original expectations? *(check one)*

- a. Yes .... [ ]
- b. No .... [ ]

If no, please comment on your feelings: ______________________________

____

____

____

____

____

____

30. Do you think you would like to continue as an Upswing volunteer next year? *(check one)*

- a. Yes .... [ ]
- b. No .... [ ]

(If no, skip to question 32)

31. If you would like to continue as an Upswing volunteer, which statement applies to you:

- a. I would not want to receive training ...... [ ]
- b. I would want to receive training .... [ ]
- c. I don't know/it depends on the training .... [ ]

Comments: ______________________________

____

____

32. If you would not like to continue as an Upswing volunteer, please comment on your reasons.

____

____

____

____

____

____

____

____

____

____

____

____

____

____

____

____

____

____

____

UNTRAINED VOLUNTEERS DID NOT RECEIVE THIS PAGE

33. Based on your experience this year, what topics do you feel it is most important to cover in Upswing training?

34. Which aspects of the preservice training given this year were not useful to you? *(please check all that were not useful and explain briefly in the space provided)*

	Check	Explain if checked
a. Orientation to project and the public schools (including your role as an Upswing volunteer)	☐	
b. Background information on child development (including what to expect from a "typical" first grader, etc.)	☐	
c. Diagnosing the child's needs	☐	
d. Approaches to tutoring (including techniques of positive reinforcement)	☐	
e. Use of Peabody	☐	
f. Use of DISTAR	☐	
g. Use of the language experience approach	☐	
h. Use of other materials and methods for reading instruction	☐	

35. How many inservice training sessions did you attend? ______ sessions

36. How would you rate the inservice training? *(check one)*

a. Good ....[ ]
b. Fair ....[ ]
c. Poor ....[ ]

37. What aspects, if any, of the inservice training were particulary useful to you? *(please describe in the space provided. If none of the inservice training was particularly useful to you, write "None' in the answer space.)*

38. Which aspects, if any, of inservice training were not useful to you? *(please describe in the space provided. If you found all of the inservice training useful, write "None" in the answer space.)*

39. The space below is provided for any additional comments you may have about your experience as a tutor, your pupil, or the Upswing program.

PROJECT UPSWING

OMB No.: 51-S-72024
Expiration Date: 6/30/72

PROJECT UPSWING
FINAL CHILD PROGRESS REPORT
FROM TEACHER

Teachers Name: ____________________

School ____________________

City: ____________ State: ____________

Zip Code: ____________________

	1	2	3	4	5
Instructions: **The questions to the right are to be answered individually for each of your pupils who has an Upswing tutor. Circle one response to each question for each child *(see example)*. Answer all questions for the first child listed before going on to the second child, etc. Space is provided at the bottom of the page for special comments on individual children when you feel it is necessary.**	**An Upswing volunteer has met with this child:** a. For most of the scheduled tutoring sessions b. For about half of the scheduled tutoring sessions c. For less than half of the scheduled tutoring sessions	**How many times has the child's volunteer been replaced?** a. Never; the child had the same volunteer since tutoring began b. Once c. Twice d. Three or more times	**What effect has Upswing tutoring had on the child's development in reading (e.g., ability to sound out new words, understanding what he reads, reading with expression, etc.)?** a. Child's level of skill, overall, seems lower b. No change observed c. Some improvement observed d. Major improvement observed e. Not applicable to child at this stage of his development	**What effect has Upswing tutoring had on the child's development in language skills other than reading (e.g., speaking vocabulary, ability to express ideas clearly, etc.)?** a. Child's level of skill, overall, seems lower b. No change observed c. Some improvement observed d. Major improvement observed	**Have you noticed any change in the child's willingness to express himself orally since tutoring began?** a. Yes, there has been a major improvement b. Yes, there has been a moderate improvement c. No, he has expressed himself freely since the beginning of the school year d. No, I have not noticed any change, but I feel there is a need for growth in this area e. Yes, he seems to have withdrawn
Example: *Jane Doe*	[✓ a] b c	[✓ a] b c d	[✓ a] b c d e	a b [✓ c] d	a [✓ b] c d e
John Doe *List all of your Upswing Pupils Below:*	a [✓ b] c	a b [✓ c] d	a [✓ b] c d e	a [✓ b] c d	a b c [✓ d] e
1. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
2. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
3. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
4. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
5. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
6. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
7. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
8. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
9. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
10. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
11. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
12. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
13. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
14. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
15. ______	a b c	a b c d	a b c d e	a b c d	a b c d e
	Comments: ______	**Comments:** ______	**Comments:** ______	**Comments:** ______	**Comments:** ______

6	7	8	9	10	11
How would you describe the child's overall progress (all subjects) toward average grade level achievement? a. Child seems to be losing ground b. Child seems to be making progress but not catching up c. Child seems to be catching up	**What change, if any, in the child's confidence and/or self esteem have you noticed since tutoring began?** a. Child seems to have made major gains in confidence/self esteem b. Child seems to have made moderate gains in confidence/self esteem c. Child seems to have remained at about his initial level, but this never appeared to be a problem area for him d. Child seems to have remained at about his initial level, but needs greater confidence/self esteem e. Child seems to have lost some confidence/self esteem	**Has the child shown any changes in amount of hyperactive behavior since tutoring began?** a. Hyperactivity has increased b. Improvement is needed but none has been made yet c. The child was never hyperactive d. The child is somewhat less hyperactive e. The child is considerably less hyperactive	**Has there been any change in the child's ability to pay attention since tutoring began?** a. The child has made major gains in ability to pay attention b. The child has made moderate gains in ability to pay attention c. Poor attention was never a problem for this child d. There is need for improvement but none has been made yet e. The child's ability to pay attention has decreased	**The child's response to his Upswing volunteer seems to be:** a. Willing cooperation b. Hesitant cooperation c. Neutral d. Confused e. Hostile	**Which best describes the attitude of this child's volunteer toward you?** a. Cooperative b. Uncooperative c. We have had little or no contact except when the volunteer comes to meet the child
a [✓ b] c	[✓ a] b c d e	a b [✓ c] d e	a [✓ b] c d e	[✓ a] b c d e	[✓ a] b c
a [✓ b] c	a b c [✓ d] e	a b c [✓ d] e	a [✓ b] c d e	a [✓ b] c d e	a b [✓ c]
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
a b c	a b c d e	a b c d e	a b c d e	a b c d e	a b c
Comments:	Comments:	Comments:	Comments:	Comments:	Comments:

12. It appears that Project Upswing has: *(Check one)*
- a. Been beneficial to most of the children participating ☐
- b. Been beneficial to some of the children participating ☐
- c. Not been beneficial to any of the children participating ☐
- d. Interfered with the progress that normally would have been made by the children participating ☐

Comments: ____________________

13. Were any trained Upswing volunteers assigned to your pupils?
- a. Yes ☐ *(Answer question 14)*
- b. No ☐ *(Skip to Question 15)*
- c. I don't know whether the volunteer(s) assigned to my pupil(s) were trained or untrained ☐ *(Skip to question 17)*

14. If yes, how do you feel about the preparation given to these trained Upswing volunteers? *(Check one)*
- a. In my opinion, the trained Upswing volunteer(s) assigned to my pupil(s) seemed well-prepared to work as tutors ☐
- b. In my opinion, the trained Upswing volunteer(s) assigned to my pupil(s) did not seem to be well-prepared to work as tutors ☐

Comments *(if you feel they were not well-prepared, please indicate what preparation you would recommend)*:

15. Were any untrained Upswing volunteers assigned to your pupils?
- a. Yes ☐ *(Answer question 16)*
- b. No ☐ *(Skip to question 17)*

16. If yes, how do you feel about the preparation given to these untrained Upswing volunteers? *(Check one)*
- a. In my opinion, the untrained Upswing volunteer(s) assigned to my pupil(s) seemed well-prepared to work as tutors ☐
- b. In my opinion, the untrained Upswing volunteer(s) assigned to my pupil(s) did not seem to be well-prepared to work as tutors ☐

Comments *(if you feel they were not well-prepared, please indicate what preparation you would recommend)*:

17. How do you feel about giving direction to Upswing volunteers? *(Check one)*
- a. The teacher should direct most of the tutoring activities of Upswing volunteers who do not receive Upswing training ☐
- b. The teacher should direct most of the tutoring activities of any Upswing volunteer, regardless of training ☐
- c. The Upswing volunteer, regardless of training, should function independently of the teacher ☐
- d. I do not know how much to give ☐

Comments: ____________________

18. Please circle the letters corresponding to the statements below that describe kinds of teacher guidance or assistance that you have provided to trained Upswing volunteers this year. *(Circle all that apply)*
- a. Discussed child's progress and problem areas ☐
- b. Had discussions to coordinate classroom and tutoring activities ☐
- c. Suggested tutoring materials ☐
- d. Helped volunteer locate tutoring materials ☐
- e. Regularly gave guidance in planning tutoring sessions ☐
- f. Regularly assigned tutoring activities ☐
- g. I did not provide guidance or assistance to any trained Upswing volunteer ☐
- h. No trained Upswing volunteer was assigned to any of my pupils ☐

Now please go back and rank items a.-f. above in accordance with your willingness to provide each kind of guidance or assistance to trained Upswing volunteers. *(Write "1" in the box to the right of the kind of guidance or assistance you would be most willing to give, through "6" for the kind you are least willing to give.)*

19. Please circle the letters corresponding to the statements below that describe the kinds of teacher guidance or assistance that you have provided to untrained Upswing volunteers this year. *(Circle all that apply)*
- a. Discussed child's progress and problem areas ☐
- b. Had discussions to coordinate classroom and tutoring activities ☐
- c. Suggested tutoring materials ☐
- d. Helped volunteer locate tutoring materials ☐
- e. Regularly gave guidance in planning tutoring sessions ☐
- f. Regularly assigned tutoring activities ☐
- g. I did not provide guidance or assistance to any untrained Upswing volunteer ☐
- h. No untrained Upswing volunteer was assigned to any of my pupils ☐

Now please go back and rank items a.-f. above in accordance with your willingness to provide each kind of guidance or assistance to untrained Upswing volunteers. *(Write "1" in the box to the right of the kind of guidance or assistance you would be most willing to give, through "6" for the kind you would be least willing to give.)*

20. What would you consider a reasonable amount of time for teachers to spend on Upswing-related activities each week? *(Please write amount of time in space provided. Be sure to specify the unit of time–minutes or hours.)*

______ per week.

21. Have you had to spend more than this amount of time on Upswing-related activities this year?
- a. Yes ☐
- b. No ☐

Comments: ____________________

22. Were you able to attend the Project Upswing orientation meeting for teachers?
- a. Yes ☐
- b. No ☐
- c. I did not know there was an orientation meeting ☐

23. Do you have a clear understanding of Project Upswing and what your role in it is supposed to be?
- a. Yes ☐
- b. No ☐

Comments ____________________

24. Please state any recommendations you may have on how teachers might be better prepared to participate in Upswing. If you have no recommendations write "None" in the answer space.

25. Based on your experience this year, which would you prefer to have for your pupils next year?
- a. Trained Upswing volunteers ☐
- b. Untrained Upswing volunteers ☐
- c. I would prefer not to have any Upswing volunteers work with my pupils next year ☐

Please briefly explain your preference: ____________________

PROJECT UPSWING CHILD RECORD FORM

Child's Name: D.O.B.*

Parent's Name:

Home Address:

Teacher:

Volunteer:

Test	Fall 1971		Spring 1972	
	Score	Percentile (If used)	Score	Percentile (If Used)
Vision Test			▨	▨
Hearing Test			▨	▨
Slossen Intelligence			▨	▨
Metropolitan Primer			▨	▨
Burks' Behavior Rating Scale				
Wide Range Achievement Test-Reading				
Beery-Buktenica Visual Motor Integration				
Metropolitan Primary	▨	▨		

*Date of Birth

UPSWING VOLUNTEER ATTRITION REPORT

Name of Volunteer

School

City

This Volunteer was:

Trained ☐
Untrained ☐

Date Upswing Participation Ended *(approximate)*

_______ ______________________________

Reason for Leaving Program *(if known)*

____

____

Report Filled Out by: